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Medical Museum Excerpts
AFIP Annual Reports
1947-19**90** [1941]

Annual Report

10. The pressure of routine technical services and other assistance provided to the Institute by the Statistics Branch have prevented the undertaking of any of the independent statistical investigations of Institute material which could and should be made. It is hoped that this situation will improve during 1948, and that the professional statistical staff will be able to devote a considerable portion of their time to such work. During the year 1947 the Chief of the Statistical Branch was, however, privileged to attend the following professional society meetings:

Biometrics Section of the American Statistical Association, Joint Meeting with the Federation of American Societies for Experimental Biology, Chicago, 18-22 May 1947.

American Statistical Association Joint Lecting with the Institute of Lathematical Statistics and the American Lathematical Society, New Haven, Connecticut, 3-5 September 1947.

First International Biometric Conference, Joods Hole, Lassachusetts, 5-6 September 1947.

International Statistical Institute, Washington, D.C., 6-18 September 1947.

American Statistical Association, Institute of Mathematical Statistics, and Biometrics Society, New York, 28-30 December 1947.

- VIII. ARMY MEDICAL MUSEUM. 1. The Army Medical Museum is the parent unit of the Army Institute of Pathology; therefore, all activities, including Pathology, the Histopathology Laboratory, and the Army Medical Illustration Service, were branches of the Museum prior to and during World Mar II.
- 2. A tremendous workload in the fields of Pathology and the Army Redical Illustration Service, incident to World Mar II, necessitated a reorganization into four major departments and a change in name to the more appropriate Army Institute of Pathology. While the change in name occurred officially in 1946, actually the inseum itself played the least important role throughout the war, since it was overshadowed by its offspring.
- 3. The final reorganization became effective with the approval of the "Organization anual, AIP" by The Surgeon General in April, 1947. This reorganization prescribes that the Ruseum shall consist of a curator, assistant curator, and two departments—the Redical Science Ruseum which is the principal scientific museum maintained for study and research for government and civilian physicians and includes the General Service Branch, the General Exhibit Branch, and the Advanced Teaching Exhibit Branch, and the Lay Public Ruseum department which maintains that portion of the museum which is open to tourists and others of the lay public who seek information on the general functions and activities of the Redical Department. It includes historical collections, exhibits on current medical topics, other selected subjects, and contributions to medicine by the Army:
- 4. While this is the Annual Report for the year 1947, it is necessary, for the sake of clarity, that a brief prologue be included as to conditions existing and events occurring during the years 1945 and 1946.

- a. During the latter part of 1945 and during 1946, in spite of the demobilization in other parts of the Army, the Institute workload continued to increase. This was in the most part due to the deactivation of overseas and Zone of Interior units, but to a lesser extent to the continued wartime development of the Histopathology Center System. The demobilization made additional material available, since material kept by the hospitals was shipped here. It also made additional professional personnel available for duty and study at the Institute; therefore, it became necessary to find space for these officers and students. Since the Museum was the only unit capable of contraction, it continued to lose floor space.
- b. Thile such improvisations were going on, search had been instituted for additional space, and in August, 1945, preliminary efforts toward the acquisition of the Spar barracks directly across Independence Avenue from the Institute were started. On 9 August 1946 Chase Hall (37,800 square feet of space) was allotted almost one year to the day after the original request for space.
- c. One of the conditions of the occupancy was that all museum material stored in the National Guard Armory be evacuated and moved to Chase Hall; it was also necessary that possession be taken immediately, since several other government agencies had also requested this space. Therefore, in early October, 1946, the tremendous task of moving 70,000 odd museum pieces, plus the large antique museum cases, was commenced. As the War Assets Administration was still in the process of inventorying the deactivated Spar equipment, and since alterations and repairs had been delayed, this resulted in the replacement and shifting of hundreds of boxes and books and thousands of pathologic specimens. To add to the confusion, officers and enlisted personnel were being rapidly separated from the Service. In addition, transfer of the Miseum of Tropical Disease and personnel, consisting of one officer and 6 enlisted men and a group of eight complete cabinet-type exhibits and numerous parts of many incomplete exhibits, arrived from the Brooke General Hospital, San Antonio, Texas. While this group of men was well trained, the majority were scheduled for separation shortly cfter arrival.
- 5. Despite slowness of alterations and lack of trained personnel, including a qualified curator, the main exhibit hall, west hall, north hall, and instrument room were open for inspection by the staff of the Institute on 2 May 1947. On 7 May this portion of the Museum was opened to the public following a brief announcement in the daily newspapers. One hundred and thirty-seven visitors passed through the Museum the first day and 8,568 during the remainder of May. Eighty-six thousand and forty-five visited in the seven months remaining in 1947. There was an average of 215 visitors per weekday and 682 visitors per Sunday with a maximum Sunday of 813 and minimum Sunday of 54.
- 6. The Tropical Disease Room was opened in July, and a portion of the southeast room was opened in August to receive prize winning veterinary and dental exhibits, which had been returned from conventions. In June, work was started on recataloging the more than 356 wax models. The year end finds this work only about 25 per cent completed, due to a shortage of professional personnel. In late August approximately the fifth rearrangement of the 34 antique cherry and metal storage cabinets in the main downstairs hall was completed to make room for The Surgeon General's exhibit on venercal disease and an exhibit on methods of protection in a one-million volt radiation plant. At year end the

sixth rearrangement of the cabinets was in process to make room for additional Surgeon General's exhibits which must be moved from temporary storage in District of Columbia Park and Planning Commission facilities.

- 7. Major A.E.A. Hudson, IAC, who accompanied the tropical medicine exhibit from Brooke Army Ledical Center, was appointed assistant curator in October, 1946. He had some qualifications toward setting up a museum along modern lines; however, he was hospitalized on 22 November 1946, and the remainder of the year passed ithout even an assistant curator to take charge of the on-the-spot work. Hajor dudson was subsequently retired, and his physical condition was such as to make his employment on a Civil Service status inadvisable. From 31 December 1946 until the opening date of 7 May 1947, two acting curators were appointed, both without my prior museum training. (Major C.F. Vorder Bruegee, 1 January to 21 Farch 1947, and Dr. R.A. Sloan, 21 March 1947 to date).
- 8. The total cost of moving the linseum and alterations incident thereto was ver \$46,000, and a paint-spray room, fluorescent lighting of the north and west halls, and wiring of the work shops are projects for 1948.
- 9. In addition to gross specimens of pathologic anatomy, there were 132 valuable accessions during the year, including one of President Lincoln's personal effects, the Hubble cystoscope collection, German microscopes, and miscellaneous apanese and German war trophies. Unfortunately, space does not permit display of a large number of exhibits still in storage, including 2,900 pathology specimens and over 1,900 Civil War bone specimens.
- 10. Work on the following additional exhibits, all correlated with the development of Army Medical Illustration Service, is in process or in the planning stage:
- a. Tropical disease exhibit on malaria and yellow fever for the 4th International Congress of Tropical Diseases, Mashington, D.C., May, 1948.
 - b. Orthopedic Pathology -- the first of the specialty pathology museums.
 - c. The history of the use of metal in reconstruction surgery.
- d. Moulage as a three dimensional medium for teaching and record of reconstructive surgical techniques.
 - e. Hoof and mouth disease-a veterinary exhibit.
 - f. Bovine tuberculosis -- a veterinary exhibit.
 - g. Pathologic effects of the A-Bomb.
 - h. Additions to the Tropical Diseasc Room.
- ll. While space is a problem, as it is for the entire Army Institute of hology, the overshadowing deficiency of the Army Medical Museum is the lack of mullified professional and technical personnel. From the time the Museum was activated (1862), the senior medical officer (Commanding Officer) has been designed the curator of the Museum, and since 1946 the Director of the Institute has

also been the curator of the Museum; sometimes assisted by an assistant or acting curator and often times without any assistance. It has been many years since the Commanding Officer could devote any appreciable time to the Euseum due to his over-all administrative and professional responsibilities. Few, if any, of the assistants or acting curators have been professionally qualified; and a search for a qualified curator and assistant curator has been under way for over a year. As yet, there are no prospects. This is extremely unfortunate, when it is considered that the Army Medical Museum is one of the important aids in training of Army pathologists and others. By law this Museum is opened to the public, and in recent years has been visited by more than 200,000 persons annually. In its present state, the teaching value of the exhibits open to the public is problematical and far inferior to that which is expected of a governmental institution

IX. AMERICAN REGISTRY OF PATHOLOGY. 1. The establishment of the National Academy of Sciences as the fiscal agent for the American Registry of Pathology was consummated on 10 January 1947 by transfer of the Registry's cash and investment assets (paragraph 4, AR 40-410). Since then, all financial transactions of the Registry have been handled through the National Academy of Sciences by the use of their regular finance forms.

There are now fifteen established registries as follows: 2.

REGISTRY OF OPHTH LLTC PATHOLOGY - Established 1922

Sponsor: American Academy of Ophthalmology and Otolaryngology

LY PHATIC TULOR REGISTRY - Established 1925

Sponsor: American Association of Pathologists and Bacteriologists

BLADDER TUTOR REGISTRY - Established 1927 Sponsor: American Urological Association

REGISTRY OF DENTAL AND ORAL PATHOLOGY - Established 1933

Sponsor: American Dental Association

REGISTRY OF OTCLARYNGOLOGICAL PATHOLOGY - Established 1935

Sponsor: American Academy of Ophthalmology and Otolaryngology

GENERAL TULOR REGISTRY - Established 1937

Sponsor: American Society of Clinical Pathologists

REGISTRY OF DERIAL PATHOLOGY - Established 1937

Sponsor: American Academy of Dermatology and Syphilology

KIDNEY TULOR REGISTRY - Established 1938 Sponsor: American Urological Association

CHEST TULOR REGISTRY - Established 1940

Sponsor: American Society of Thoracic Surgeons

REGISTRY OF MEUROPATHOLOGY - Established 1942

Sponsor: American Association of Neuropathologists

Annual Report

b. A factor of considerable detriment to the Photography Division was and continues to be the total lack of air-conditioning facilities. In the Technical Duplication Branch, temperature and humidity changes seriously effect the registration of the successive superimposed impressions used in color printing. A similar problem was encountered in the Still Picture Branch in the making of color prints and transparencies, in addition to the problems of high temperature effects on photographic materials and chemicals. There also exists an urgent need for an air-conditioned film storage space to protect the growing collection of irreplaceable negatives, color transparencies, and motion picture footage. Adequate storage for these materials as well as for unexposed film is imperative for proper preservation.

Section IV ARMY MEDICAL MUSEUM

- l. GENERAL. The major effort of the Army Medical Museum during 1948 has been made in cataloging the collections and accessions which had been placed in storage during World War II. Working conditions, personnel, and maintenance and supply services were inadequate for a rapid conversion of the wide scattered deposits of museum items and documents into a workable file of scientific and historic data. However, comparison with 1947 shows all elements slightly improved. There were fewer personnel changes in 1948. Space was increased by 1,466 square feet. The year ended with the staff technically and professionally more adequate, better organized, better supervised, and with more stable working conditions.
- a. Inventory and Records: Lack of adequate professional and experienced clerical personnel and poor working conditions slowed inventory operations. However, in spite of limitations, continuous progress was made in the removal of large numbers of museum items from storage. General sorting and carding was completed on the large volume of museum items previously in box storage in the Maine Avenue National Guard Armory. This material was inventoried, repacked, and stored in the Main Building Annex. Transfer of approximately 9,524 items of the Huntington Collection of Comparative Anatomy and approximately 10,000 old museum specimens of the pathologic, anatomic, comparative anatomy, and accession series from the basement of the main building to Chase Hall was started. This job is 80 per cent completed, recuiring 14 to 16 more truckloads to remove the remainder of the above material from the main building.

A detailed item inventory of the Hintington Collection has not been started. However, general grouping has been virtually completed, and cross-checking of the individual items with the limited records available will start soon. Until the latter is completed, it will not be possible to determine the present or future teaching value of the collection to the Institute.

Inventory of the Jonathan Wainwright Collection is still in process. The final collection appears to total 48,512 items instead of the previous estimate of 10,000. Work on this collection should be completed by the middle of April and ready for incorporation into Central File.

Shown below is a summary estimate of the number of items currently in the Museum. The biologic specimens, particularly the pathologic type, currently being cataloged and arranged on open shelves for use as training material by the various specialty groups of the Department of Pathology

and other sections of the Institute. Concurrently with cataloging and placement, the pathologic specimens are being reviewed by the Chief of the Pathology and Anatomy Division for discarding, remounting, or processing into plastic in the presently developing museum laboratory.

The instruments are generally located. Detailed cross-checking against old records or the preparation of new records was only partially completed during 1948. One important replacement was made to the microscope exhibit. A technician for the cleaning, repair, and replacement of missing parts is badly needed.

Time has not permitted a detailed review of historic and scientific data, including letters by Billings, Woodward, and others, which reflect early museum activities. There is no way of telling what may be unearthed by a person sensitive to the historic possibilities in this material. For the present it will be indexed and maintained as an accessible file until time permits of a studious review.

Estimate of the number of items currently in the Museum: (1948)

(1)	Biologic	Specimens

(a)	Pathologic gross	11,819
(b)	Wainwright, Gray, microscopic	34,638
(c)	Anatomic	4,739
(d)	Comparative anatomy	3,590
	Entomologic	5,200
(f)	Miscellaneous (reptiles, etc.)	45

(2) Instruments.-

60,031

4,759

1,543

(a) Optical	
1. Microscopes	446
a. Objectives & microscope	
accessories	365
2. Eye glasses	216
Ophthalmoscopes	323
4. Cystoscopes	50
5. Laryngoscopes	98
6. Miscellaneous	45
4.5	

(b) Medical and Surgical Instruments	
1. Operating instruments	1,949
2. Thermometers	55
$\overline{3}$. Syringes, lancets, scarifiers	279
4. Forceps, obstetrical	98
5. Stethescopes, percussors	269
6. Hearing aids	76

(c) Miscellrenous

1. Cupping cups & historic instruments

490

(d) 4 boxes 30x14x18 dental equipment, German (unaccessioned)

		•		
(3)	Models, Casts, Reconstructions (Wax), State	ues		•
	 (a) Papier Mache! (b) Plaster Paris (c) Stone (d) Wax (e) Wood (f) Wire and wood (CNS) (g) Statues (h) Huntington 1. Wax 2. Corrosions 3. Reconstructions (wax) 	7 1,159 639 1,164 43 3 24 100 450 110	3 , 699	
(4)	Histories and Scientific Data		,	
	 (a) Record cards and folders relating to Civil War specimens (b) Correspondence files and documents of Civil War period (c) Catalogs, coins, stamps, instruments, etc. (d) Historic photographs, negatives, metal cuts (exclusive of negatives, War of Rebellion, transferred to AMIS, and exclusive of 60 packages, and 3 portfolios of old photographs and drawings classified but not inventoried) (e) Books, Ball and other collections, Museum catalogs (f) Pictures (oil, etching, etc) framed (g) Drawings (Netter) originals (h) Reprints, Ball, Wainwright, Huntington and other collections 	34,693 11,158 439 10,002 558 29 40 6,000		
(5)	Medals, Coins, and Stamps		62,919	
	(a) Coins and medals(b) Insignia(c) Stamps	2,750 171 510	3,431	
(6)	Collections (named)		34	
(7)	Weapons		153	
(8)	Miscellancous (undetermined at this time)	,	l	.35,02

Tabulations of new accessions, loans, and material placed on display during 1948 are shown in Exhibit \underline{X} .

b. Attendance: Attendance by visitors from all states of the nation and over 15 foreign countries totaled 122,216 for the year. This is slightly lower than the highest annual attendance figure of 125,000 for?

the year 1945 (see Exhibit Y). The latter figure can serve as a baseline for determining the effects of new exhibit policies and public announcements on future attendance.

- c. <u>Backlog</u>: The backlog is still expressible in only general categories. However, by the end of the first quarter of 1949 the outlining of the many smaller projects within the larger general groups will allow for a more specific quantitation.
- 2. PERSONNEL. Personnel changes were frequent during the year but less so than in 1947. Of a total of 25 persons on the Museum staff, 5 served a full twelve months.

During the latter part of 1947 and throughout 1948 a search for adequate technical and professional personnel was made. In October the situation improved with the addition of a chief of the Pathology and Anatomy Division, a chief of the Museum Laboratory and Techniques Research, and an administrative assistant and secretary to the Curator. The position of a chief of the Historical Research continues vacant in spite of a review and interview of 8 possible candidates. Search continues for a physician for this important position as well as for technical assistants to fill out the laboratory staff. At year end all but one of the short-term enlisted personnel had been separated from the Service. The remaining military and civilian personnel anticipate continuation in regular service.

Thorough orientation and training for each new clerk or enlisted man is necessary. The type of material, terminology, and methods of handling were new experiences in all cases. Special care was taken to properly impress upon old personnel the historic and scientific value of the various museum items handled, regardless of the appearance or their personal opinion about such items. Periodic review of this subject has been pursued. During the second quarter this effort has resulted in fewer instances of breakage and consequent loss.

3. SPACE ADJUSTMENTS. The Southeast room was completely cleared for exhibits and the main downstairs room partially cleared. In the latter case, the number of shifts necessary to make room for the new laboratory and the Huntington Collection and other material in the main building basement at the same time were very nearly astronomical. Further shifting of large numbers of museum jar specimens because of possible freezing was required by delay in the construction of a weather-tight wall on the south downstairs porch.

In spite of the seemingly large area of approximately 25,000 source cet for sorting, cataloging, storage, and display, the problem of maintain-seproper balance between space, workload, insufficient personnel, and immu working conditions was difficult. The initial post-war stage of condition has given way to a stage of concentrated storage of items of generally known type, condition, and location. During the month of December, additional space adjustments were necessitated by severe leaks in the Tamparoof.

4. RESEARCH. Activities in the field of museum techniques have been hampered by lack of laboratory facilities and equipment. A few studies on the effects of polyester styrene and acrylic resins

on color preservation have been completed with indifferent success. Preplastic coating of botannical specimens with alginates indicates definite lines of future research in this field of color preservation or retention upon completion of the laboratory. During the summer Acryloid B-72 was used to dip-coat Civil War bone specimens with favorable results. The use of sprayable plastic would greatly facilitate the work of reconditioning bones, instruments, bullets, etc. At year end this work was underway. Search for a protective coating for finished plastic block continues. A few waxes and varnishes have been tried without success.

Some research has been carried on in staining gross specimens for tissue differentiation, preparatory to embedding in plastic as a ready but unsatisfactory and purely artifical method of color conservation.

5. SUMMARY. The acquisition of a well-trained and more stable working force is imperatively needed to complete the task before us. A small, partially trained nucleus of the above needed staff is finally functioning, and an appreciation of the volume, type, and methods of work requisite to achieve this goal is now understood by the staff.

Time, patience, and persistent attention to innumerable details within the coming year, coupled with an adequate staff, will see the Army Medical Museum started on its return to its rightful place as an unparalleled working body of scientific and historical medical data in the Western Hemisphere.

Section V AMERICAN REGISTRY OF PATHOLOGY

- 1. POLICY CHANGES. At the request of the National Research Council, and on the recommendation of the Scientific Director of the American Registry of Pathology and the Director of the Army Institute of Pathology, a meeting was called on 5 November 1948 of the Subcommittee on the American Registry of Pathology of the Committee on Pathology, National Research Council, together with the chairmen of the individual registry committees of the participating societies. In view of the phenomenal growth and expansion of the American Registry of Pathology, this meeting was held to review the policies and purposes of the individual registries in order to crystallize more formally the professional and administrative details involved, and to correlate the functions of the Registry with those of the Institute to assure maximum usefulness of the facilities of both. As a result of this meeting, it was agreed:
- a. That each sponsoring society define the scope of its registry.

 Was pointed out that some registries were defined to a degree while

 Others were not defined at all.
- b. That there be appointed to each registry a senior pathologist from the Department of Pathology to correlate the interest of the special registries within the department. It was contemplated that all cases deposited in the registries would be scrutinized as to diagnosis and value to the Registry and a follow-up system instituted of all valuable, questionable, and important cases.
- C. That the former method of circulating slides would be disconant and that study sets would be loaned to professionally qualified

MEDICAL MUSEUM DEPARTMENT

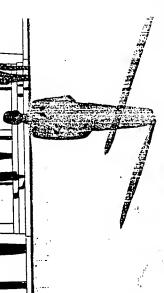
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CONDUCT RESEARCHES IN MUSEUM METHODS

TRAIN MILITARY PERSONNEL AND OTHERS IN MUSEUM TECHNIQUES



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APT TO

SECTION IV

THE MEDICAL MUSEUM

RUELL A. SLOAN, M. D., CURATOR

- 1. GENERAL: During the year 1949 progress was made in all departments of the Medical Museum. Stability of the staff, better supervision and conequent improvement in morale, interest and efficiency have resulted in a ery productive year, in spite of continued limitations of overall personnel equirements. Existing museum collections have been reorganized with the aid of previously revised museum indices and files. Increase in color, more leasant vistas and improvement in displays have resulted from extensive hanges of old, and introduction of new exhibits. The reaction of the public and professional visitors has been gratifying. An increasingly favorable esponse is to be expected as further insertions of the newer type exhibit is thieved. Closer liaison has been established with the departments of the astitute and with organizations such as the Army Medical Library. Technical raining of civilian and military personnel in museum methods, including lastics, has begun.
- 2. INVENTORY OF MUSEUM ITEMS: Summary of museum items shows a total f 88,124 items in the working collection of the Museum at the end of 1949; yer 38,000 items were disposed of during the year. (See Exhibit A)
- a. Cataloguing of the wet-mounted specimens, started late in 1948, was completed in July 1949. Accession, anatomic and etiologic (diagnostic) cards, imbering approximately 22,000, appropriately cross-indexed, were also completed and in use by August.
- b. The Huntington Collection is the only large collection of the extensive wartime storage still requiring detailed cataloguing and disposition. Experiments designed to accomplish restoration of accidentally dried specimens of this collection are under way in the Laboratory and Technical Research Dission. Favorable results are anticipated.
- c. Inventory of the Jonathan Wainwright histopathology collection, tarted during 1948, was completed in March 1949, and 30,638 correlated slides and 19,639 case histories were transferred to Professional Records, Adminitrative Division, AFIP, for integration into the general file of pathologic aterial. Four thousand slides without histories are being retained in the fiseum for a limited period, pending possible discovery of associated case listories. The collection of 5226 Wainwright reprints was sorted according to pathology specialties and transferred to the respective units of the Pathology Department.

- The historical instrument collections were reviewed, sorted, photoraphed by Museum personnel, wrapped, packed and stored, or exhibited. ate location records are now available, with a final count, except in casional instances where multiple items, with little or no history, were ccessioned under one number. A number of historical instruments, the locaions of which were unknown on 1 January 1949, have been found and approprite location records made. New accession numbers have been added to the eneral accession files in appropriate instances. The compilation of detailed istorical data, first on the more important historical instruments and later all historical instruments, must await staffing of the Historical Research ivision.
- The collection of Civil War gunshot injuries and associated diseases Li s maituro e. The collection of Civil war guishot injuries and accordance are considered. Old records as completely inventoried, carefully wrapped, packed and stored. Old records are the complete and current accession numbers applied as need for the constant of the

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- The section termed Historic Scientific Data still awaits a detailed f. tudy. However, it has been pecked at from time to time and the potentiali-polytical tudy. However, it has been pecked at from time to time and the potentiali-polytical tudy. However, it has been pecked at from time to time and the potentiali-les indicated in the 1948 report are still warranted. A few of the items
- (1) Original copy of a statement by J. J. Woodward about first use r photomicrographic equipment in Army General Hospitals (Asst. Surg. Thomson ind Norris, Douglas Hospital)
 - (2) Reference to Woodward's "prehistopathologic" interest in cancer
 - (3) Reference to Woodward's independent use of aniline dyes as a 1864 mistologic stain
- (4) Case histories, occasional gross specimens, microscopic slides (4) Case histories, occasional gloss open and in his historathological in a majority of the 18 cases used by J. J. Woodward in his historathological in a majority of the 18 cases used by J. J. Woodward in his historathological in a majority of the 18 cases used by J. J. Woodward in his historathological in a majority of the 18 cases used by J. J. Woodward in his historathological in the structure of Cancerous Tumors and the Mode m which Adjacent Parts are Invaded. Presented as the first Toner lecture 1872
 - (5) Copies of Prof. J. W. Draper's Daguerreotype photomicrographs 850) and J. J. Woodward's personal note on the early history of photomi-1876 rography
 - (6) Correspondence about Sternberg's early interest in Yellow 1878
 - (7) Correspondence on Billing's 10th Census 1880
 - (8) Information on Billing's attempts for a new museum catalogue

- (9) First and some subsequent publications on the role of the Army Medical Museum as the National Dental Museum
- (10) Bailey K. Ashford's original discovery of Anclystoma duodenale as cause of Porto Rican anemia (Hookwork Disease) 1899

(11) Annual reports

1882-1906

- g/ The records of old specimens of the Civil War era are confused and incomplete. However, a continuing review of a large number of extensively fragmented accession books, diagnosis lists, case history books, correspondence books, etc., is gradually filling in the chronologic gaps. It may be inferred that the location of specimens and records, or disposition of the former, can shortly be determined with a fair degree of accuracy.
- 3. ATTENDANCE, NEW EXHIBITS, LOANS, ACCESSIONS: 123,326 persons visited the Museum during 1949, 213 new items were added and 635 new or revised exhibits were shown. See Exhibits C and D.
- ence and improved supervision evident during the latter part of 1948, showed excellent results during 1949. Changes in the working staff were fewer during 1949 than 1948. Of a total of 19 persons, 11 served a full twelve months in contrast to 25 and 5 in 1948, and 32 and 1 in 1947. The resultant improvement in training and increase in practical experience consequent to greater stability of the working staff resulted in improved morale and increased accomplishments. Replacement of personnel was slow. Recruitment of personnel to required level for full museum activity did not occur. Recruitment, particularly of the professionally trained persons for the Historical Research and Educational Planning and Information positions was limited by a severe shortage of qualified persons in these fields. See Section I Exhibits B and D for personnel assigned as of 31 December 1949.
- 5. a. DEPARTMENTAL REVIEW (WORKLOAD): Early in January 1949 lists of contemplated projects for the year were prepared by each major unit of the Museum. It was possible to follow through on a large majority of the projects except where delay or failure of procurement of necessary supplies, equipment or personnel prevented the formulation of practical working schedules.
- b. Many of the projects, such as evacuation of museum items from the main building; inventory, of Civil War gunshot injuries, historical instruments and prostheses, Jonathan Wainwright Collection; review and sorting of Wainwright reprints; preliminary cataloguing, indexing and storing of Huntington Collection; sorting, etc., of historic scientific data, required coordination between the professional, technical, administrative and maintenance units. Although each had additional duties specifically referable to their respective units, the coordination was carried out smoothly with the least possible waste of time and motion.

- 6. GENERAL SERVICE BRANCH: a. HELEN R. PURTLE, CHIEF. This division consists of the Office Service Section, Records, Files and Storage Section, and Maintenance. Because of the interrelationship of tasks incident to museum activities, this group can best be discussed as a unit.
- b. Early in 1949 all miseum items still remaining in the basement of the Institute were moved and relocated in the Museum. Inventory and cataloguing were completed on 18,641 museum items. The sorting and correlating of the Jonathan Wainwright slides and case histories were completed early in the year, and 19,639 histories and 30,638 slides were sent to Professional Records for incorporation into their files. During 1949, this unit manually assisted in the erection and rearrangement of 635 exhibits, expressed as 4° x 6' panels; typed, indexed and filed 31,000 cards; refiled alphabetically large numbers of historical records that had become disorganized during the many moves in the past ten years. In addition, secretarial services were rendered to the Chief of Pathology and Anatomy in his capacity as Registrar of the Cardiovascular Registry, and to the Chief of Laboratory and Technique Research.
- 7. LABORATORY AND TECHNIQUE RESEARCH DIVISION: a. THOMAS N. HAVILAND, CHIEF. During the first nine months of the year this division included only its Chief with occasional assistance of personnel assigned from the General Service Branch. In September one enlisted man with six months experience in gross specimen preparation was assigned to the routine laboratory.
- b. During the first three months of the year, the Chief of the division was occupied primarily with supervising and assisting in the movement of museum holdings from the main building to Chase Hall. Exhibit 9 presents a final tabulation of the material moved during 1948-49. The majority of the 6364 units represented multiple museum items, each of which had to be handled on an average of seven times.
- c. Temporary laboratory quarters set up during 1948 were slowly improved. Limited studies on the use of plastics for mounting and coating gross specimens were carried on; however, the majority of the work for the remainder of the year was directed to review, withdrawal and restoration of the substandard specimens on museum display and from the storage files. Exhibit E presents a breakdown of the items repaired and specimens mounted in plastic in this division.
- d. Early in the year studies to provide a thin, transparent coating for gross specimens were instituted. A preliminary report on this work was presented at the April meeting of the International Association of Medical Museums. The method provides a bransparently coated specimen in which size, shape, color, relative weight and consistency are available for study. In contrast to solid plastic mounts, the original tissue is available for future study. Storage in water suffices to keep the coating pliable for an extended period. Further standardization of technique relative to color retention and storage characteristics are required. Solid transparent plastic mounts of melanoma of the eye and associated metastases to various organs were prepared for an ophthalmologic exhibit, and other plastic mounts were prepared for

museum display. Color retention in most instances has been good, but a constant, easily repeated technique has not yet been developed in this dificult field of museum preparation.

- e. Throughout 1949 continued liaison was maintained with the Supply Office relative to procurement of laboratory furniture and equipment, and installation of the same. The contract for the laboratory furniture was let to the Metalab Company, April 1949. It was delivered and installed by 31 October; inspected, approved and released by 17 November. The laboratory was occupied by Museum personnel in December but, lacking proper wiring for the ovens and buffing and polishing equipment, only limited activities could be carried on. At the end of the year lighting and special wiring had been requisitioned, but not installed.
- 8. FATHOLOGY AND ANATOMY DIVISION. a. HENRY W. EDMONDS, M.D., CHIEF.
 During the year this division included only its Chief, with assistance
 of a secretary who was at the same time secretary to the Chief of the Laboratory and Technique Research Division and supervisor of the Office Service
 Section of the General Service Branch. The division Chief carried out the
 following activities.
- b. A group of 5391 wet-mounted gross pathology specimens were sorted and coded for shelving, using a simplified Angerist modification of the Standard Nomenclature (A.M.A.). Frofessional supervision was then given to the preparation of a full diagnostic cross index card file of the collection. A preliminary sorting of the Huntington collection was made, and professional guidance was given to the clerks of the General Service Branch in the inventorying of the Ball, Blackburn, and other minor collections.
- c. The organization of the stored collections of the Museum, just described, facilitated utilization of these collections in three major revisions of the existing public displays. The sections of the display halls dealing with anatomy, comparative anatomy and embryology, with general pathology and with medical instruments and appliances were each re-worked, and specimens were placed in more meaningful sequences, inadequate specimens culled and others placed in more storage collections. The results of these operations would be even more striking had the Museum been able to secure a suitable large-type Electromat typewriter for use in relabelling the displays.
- d. Utilization of the classified and indexed stored collections of the Museum was made in the preparation of a series of "Featured Item of the Month" displays, initiated in July and followed regularly thereafter. Another new exhibit developed by the Fathology and Anatomy Division was "Contributions to the Medical Museum by Former Members of the Medical Society of the District of Columbia" a display of primary medico-historical import. A major exhibit on Filariasis, a unit for the projected tropical disease section of the Museum, was developed as far as the stage of a "mock-up" final working plan.
- e. Liaison with the Department of Fathology of the Institute was effected by the Division Chief in several ways. The services of Cartain Tiecke were secured for sorting out stored collections of dental casts. A

set of specimens was selected for Doctor Mostofi to take to the meeting of a national urological society. A set of specimens was arranged for a display of dissecting aneurysms contemplated by Doctor Gore. A set of specimens was pulled from the filer for the exhibit on metastatic melanomas of the eye. This exhibit was prepared by the Medical Illustration Service for Mrs. Wilder. The Division Chief also prepared the draft of a standard operating procedure on processing of gross tissue in the Institute, which was subsequently adopted, and (together with the Curator of the Museum) participated in the committee under chairmanship of Major Vorder Bruegge to plan the reorganization of the gross tissue storage system of the A.F.I.P.

- f. The nucleus of an Advanced Teaching section of the Museum was formed by the selection, tagging and cross indexing of a hand study collection of some 350 un-mounted gross specimens obtained by referral of specimens in current cases, and by search of the existing, inadequately organized, "dupe" storage section of the A.F.I.P. preparation room.
- g. Docent service was provided by this Division for the various groups requesting such guidance, ranging from local high school classes to groups of dental R.O.T.C. cadets.
- h. Professional studies of the Pathology and Anatomy Division include preparation of two scientific papers, to be listed elsewhere in this report.
- i. During the latter two-thirds of the year, the Chief of the Division was also active as Registrar of the Registry of Cardiovascular Pathology (American Registry of Pathology). In this connection he attended two national medical meetings and participated in two administrative conferences with the Advisory Committee of the Registry. 253 cases were registered. A form for contributor's record of data was devised. Plans were formulated to secure a Junior Fellow (supported by the American Heart Association) to work in cardiovascular pathology beginning in July 1950.
- 9. HISTORICAL RESEARCH AND EDUCATIONAL PLANNING AND INFORMATION: Activities in these units of the Museum have been carried, on a small scale, as part of the activities of the Curator's office. Repeated requests for Civil Service assistance, inquiries to consultants, medical history groups and training centers for historians and health educators have been to no avail. Recruitment through Civil Service is continuing but results are doubtful. Two applicants are under study.
- 10. RESEARCH: a. Activities in this field may be classified as technical and historical. However, in both fields problems have been dictated by requests for material for exhibits, or limited by need for the few available personnel to deal with technical or professional problems associated with the restoration of the museum collections or files.
- b. The technical studies of plastics, started during 1948, with the exception of color preservation of gross specimens, have been completed, or discontinued as unnecessary. A sprayable plastic has been found, and is now used to coat restored bones, instruments, bullets and similar dried specimens.

The search for a hard wax or varnish finish has been discontinued as unnecessary. Extensive handling on hard surfaces has resulted in shallow scratches which, however, can be readily removed by light buffing. Studies in color preservation of fixed gross specimens, studies in plastic coating of the same type of specimens, and restoration of desiccated specimens, previously mentioned in the section on the Laboratory and Technique Research Division, are continuing. Further study and standardization of techniques are needed in all these efforts.

- c. Historical research studies dealt mainly with examination and correlation of the historic records of the Museum and Army Medical Library to provide historical data and items for exhibit purposes, or to clarify points in the history of the medical department, museum or individuals associated therewith. Assistance was rendered to members of the Department of Pathology, A.F.I.P., Preventive Medicine, S.G.O.; Laboratory Service, W.R.G.H.; Medical Illustration Service, A.F.I.P.; and Army Medical Library, in the form of museum items or historical data for twelve exhibits.
- Il. TRAINING. a. Although lacking in practical experience, the majority of the staff was indoctrinated during the latter part of 1948 in methods of handling rare and valuable museum items. A fortnightly Museum staff meeting served to answer questions of policy, correct errors or omissions and review plans applicable to sections, or to the staff as a whole. New personnel received a short period of orientation in the relation—ship between their section, the Museum and the Institute as a whole in addition to their specific duties. In the Laboratory and Technique Research Division technical training of an informal type has been extended to two members of the staff and, for periods varying from a few hours to a week has been extended to an estimated twenty-five visitors from the United States and foreign medical institutions.
- b. Maintenance and inventory duties have prevented training of likely civilian and military personnel in the rudiments of laboratory practice, particularly relative to the simple, repeated operations required in mounting gross specimens in plastic.
- c. At the close of the year an outline of an elementary training program for inexperienced personnel, and preparation of a list of current plastic mounting techniques was in preparation for use in a formal training program scheduled to start 15 February 1950.
- 12. EXHIBIT PLANNING. During the year a great deal of shifting, adjusting, deletion of substandard specimens and additions of new material was accomplished for the improvement of old museum exhibits and placement of new M.I.S. exhibits (Exhibit D).
- b. Consultations with outstanding authorities on professional and technical matters referable to tropical disease exhibits and general museum problems were held. Discussions of the five basic diseases, Malaria, Schistosomiasis, Amebiasis, Hookworm, and Filariasis, to be developed in the tropical disease section were held with Dr. E. Carroll Faust and Dr. Willard H. Wright.

A basic outline for Filariasis was prepared, and planning work was started on a Schistosomiasis Japonicum exhibit.

- c. Freliminary planning and associated conferences on redesign of the entrance, foyer and the main display areas of the Museum were held with the staff of the Medical Illustration Service. Similar discussions and preliminary cutlines of type and location of material for an historical photomural for the entrance walls and "History of Modern Medicine" exhibit for the upstairs foyer of the present building, have been held. This work is locked upon as a "test run" for similar planning in the Museum section of the new Institute.
- 13. MUSEUM EDUCATIONAL SERVICES. Frior to the end of 1949 reorganization problems prevented the Museum from devoting the major proportion of time and effort toward the development of educational services. At the end of the year reorganization*, for practical purposes, was accomplished. Basic policies referable to current and future development had been formulated and general schedules for the completion of the following programs were in process: (1) redesign of display facilities of the present museum and study of similar problems relative to the new Institute; (2) Flanning and production of syncrtic medical exhibits on subjects of military medical importance; (3) photodurlication of museum exhibits; (4) development of mobile museums of gross specimens mounted in plastic for loan to field installations; (5) expansion of the facilities of the Advanced Teaching Museum for Armed Forces and authorized students: (6) development of the Historical Research Division for the collection of historical data on pathology during World War II, catalogue and history of the Museum and historical data required in planning of current exhibits; (7) development of the Educational Flanning and Information section of the Curator's cffice to increase exhibit planning and educational utilization of the Museum and its services by Armed Forces officers, civilian physicians, high school, college and medical school students; (8) expansion of technical training and research.

*Operations pertinent to reorganization consisted of transporting, cleaning, repairing, sorting, preliminary cataloguing, temporary storage, final cataloguing, cross referencing, indexing, filing, accessioning, wrapping, packing and final storing of over 126,000 museum items and the salvage or discard of damaged medical items and a great bulk of unrelated or distantly related material.

14. SUMMARY. The year ended with the staff technically and professionally as it was at the end of 1948 but with added experience on the part of all relative to the problems of the Museum. Working conditions continued unsatisfactory. Working force was more stable, interested and efficient, but the total strength was below requirements. Supply of standard items, with a few exceptions, improved, but service on special items continued slow. Total space was inadequate especially space with heavy weight bearing properties and a disproportion between storage and display space was evident. Accordingly, there was excessive crowding, or tendency to ever-loading, in some areas and inadequate space utilization in other areas. Resea on and training activities were not up to expectations due to slow procurement of equipment and technical personnel. Exhibit planning progressed slowly but constantly. Slowness of progress was due to small exhibit planning staff in the Museum, and heavy workload in the exhibit production activities of the medical Illustration Service.

Frogress in overall development has not been as rapid or as complete as planned at the close of 1948. Farticularly the development of modern exhibits, preparation of teaching material for the field and development of the historical and educational planning groups have not been up to expectations. However, in spite of conditions mentioned in the body of the report, there has been a distinct sense of accomplishment and pride in the adaptability, perseverance and willingness of the junior staff to tackle and complete assignments previously outside their various ranges of experience.

SUMMARY OF ITEMS IN MEDICAL MUSEUM AS OF 31 DECEMBER 1949

Biologic Specimens		19,737
Fathologic - gross: Wet-unmounted Wet-mounted Flastic mounted Bones (Civil War) Entemologic Anatomic Comparative anatomic (Huntington and old series		
Miscellaneous - rertiles,		
Instruments and arrliances		3,433
Models, etc.		3,699
Historical scientific data	-	56,609
Medals, coins and stamps		2,128
Wearons		168
Wood cuts		2,347
Feruvian mummies	• • • • • • • • • • • • • • • • • • • •	3
Items disposed of in 1949		38,684
*	GROSS TOTAL	126,308)
NET TOTAL remaining after di 38,684 items	sposition of	88,124
Named collections	37/	

SECTION IV.

THE MEDICAL MUSEUM

Ruell A. Sloan, M. D., Curator

I. CENERAL.

Over three years have elapsed since the opening of the Museum in its present quarters. The staff has changed from one physician and a few inexperienced enlisted men to a staff of 21, which comprises a nucleus of the professional, technical, and administrative pergonnel necessary to the basic operation of a comprehensive medical museum. Gradual filling of position vacancies is being accomplished as qualified personnel become available. The Museum proper has changed from a large vacant recreation hall and asserted smaller rooms to an organized exhibit area with over 300 displays, which reflect broad medical interests of value to the public, junior medical officers, and specialists. Increasing use of color and improved vistes continued to be justified by the reaction of public and professional visitors. An Advanced Teaching Laboratory has been set up under the Chief of Pathology, Anatomy, and Embryology. Research continues in specimen proparation tochniques, such as plantic conting, the use of polyethylone bags and carbowax for the preparation and transportation of specimens.

II. CURATOR'S OFFICE.

General direction of all museum activities originates in the Curator's Office. As divisions and branchos are activated, the implementation of appropriate administrative, technical and professional programs is delegated to the chiefs of the respective museum units.

- a. Historical Research and Educational Planning and Information: Pending the procurement of a Chief of the Historical branch the library research necessary to the proparation of medical exhibits and informational pamphleta is being carried on to a limited artent by the Information Section which was activated in April with the transfer of Mrs. Evolyn Drayton from the Office of the Director to the Medical Museum. At your's end a condidate with her doctorate in social sciences and considerable medical, statistical, and library research background was being considered for the position of Chief of Educational Planning and Information.
- b. Information Section: (Mrs. Evelyn Drayton, Chief).
 Starting in April regularly scheduled news releases were issued on all new exhibits and activities of the Museum. To date 690 releases have been sent to newspapers and magnines. This represents 30 items released to 23 different sources. Sunday moving picture

on medical and public health subjects were instituted on July 1, and have been shown to an average audience of 75 persons per Sunday. On August 1, the first of the mimeographed pamphlets on the history of the Institute and the Museum exhibits was published. Since that date eight pamphlets have been released. To date 5700 pamphlets have been distributed to visitors to the Museum. Conducted tours for high school and college groups were announced in October, and to date 12 tours have been given by the Information Office. An increase has been noted in the school groups being brought to the Museum in conjunction with classes in hygiene, biology, general science, and art.

In the absonce of an archivist, this section has reviewed \$527 old records and documents in the Museum files, and has classified 2455. Since April, 130 public relations interviews have been held.

c. Research, Training, Exhibit Planning:

1. Research: The research program of the Museum is divided into specimen preparation techniques, historical research, exhibit analysis, and pathologic investigation. Reference to these respective groups has been made in the appropriate sections.

2. Training:

- (a) General: All newly assigned personnel require a short period of indectrination, especially enlisted and civilian personnel employed in the movement and cleaning of museum items. Breakage has been greatly decreased as the result of initial indectrination and periodic review.
- (b) Laboratory: From Merch 2 to June 8 a training course in museum methods was conducted. Two civilian and five enlisted personnel attended two one-hour sessions per week on essential phases of museum techniques, including plastics.
- (c) Orientation of Guard-Gwides: Enlieted members of the Museum staff have served as guard-guides on Saturdays and Sundays since the start of the moving picture programs in July. Orientation talks of one-half hour weekly are given by Dr. Henry W. Edmonds or Mrs. Evelyn Drayton to review questions on old exhibits, and present new once.

3. Exhibit Planning:

A conversion to the "Three Museum Plan"

(1,2*) started in 1947 was continued during 1950. n total of 19 exhibits planned and produced during 1950 are listed in Exhibit 33 F Projected plans includes three-phase development of the main hall into the General Medical Museum; continued production of historical exhibits for the Lav Public Museum; rearrangement of space and collection of data for further development of the cubical pattern of the Advanced Teaching Museum; increasing liaison with Navy and Air Force for development of respective sections of the General Medical Museum, formulation of plans for incorporating the Museum into Armed Forces Reserve Officers Training Programs and formulation of an exhibit exchange program with Armed Forces and affiliated Federal Medical Agencies. A preliminary plan for coordination of civilian defense training activities and public museum display has also been proposed.

- d. Museum Loan Service: The following categories of materials are available for loan.
 - 1. Gross pathology specimens mounted in plastic.

2. Collections of historical material.

- 3. Extended renewable loans of duplicate museum items.
- 4. Joint Army Medical Library-Medical Museum traveling exhibits.

Detailed lists of material or exhibit totals are available upon request.

The idea of a series of joint traveling loan exhibits to be executed by the Medical Museum in collaboration with the Reference Division of the Army Medical Library was proposed by Dr. Edmonds, and initial liaison work was undertaken. The plan is to circulate small exhibit sets among a select group of medical school libraries. Content of the exhibits is to be by selection from the "Featured Item of the Month" series of the Medical Museum and from similar Monthly exhibit series prepared by the Reference Division, Army Medical Library.

III. GENERAL SERVICE DIVISION: (Miss Helen R. Purtle, Chief)

This division handles the routine administrative activities of the Museum relative to personnel, supply, fiscal, office services, records, storage and inventory of museum items, and maintenance operations.

a. <u>Personnel</u>: The increase in practical experience and l* The army Medical Museum, Col. Raymond O. Dart, BIAN XXVII 2* Report 7th Meeting AFIP, Scientific Advisory Board, 16 Dec. 1950. improved supervision evident during 1948 and 1949 continued throughout 1950. Increased stability of the staff has been a pleasant characteristic of this year. All division, branch, and section supervisors on duty in January 1950 continued throughout the year. Turnover in nonsupervisory clerical positions, both military and civilian, was fairly active. A full time secretary for the Chief of Pathology, Anatomy, and Embryology was added in February. An Information Specialist was added to the staff in April. During the year three additional technicians, one civilian, and two military were added to the Leberatory. The former was drafted in November. The positions of Chief of the Historical Branch, Archivist, Chief of the Educational Planning and Information, Deputy Curator and Secretary to the Curator continued unfilled because of procurement difficulties at year's and.

The supply of trained museum personnel is severely limited. Conversion of military and civilian, medical and, dental technicians to museum technicians has been accomplished to provide necessary museum laboratory personnel. To maintain as constant a staff as possible with the present shortages of enlisted personnel, utilization of women and men exempt from military service is indicated.

- Inventory of Museum Items. Physical inventory, professional review, indoxing and on taloguing of pathological, anatomical, ombryological, and historical museum items, and documonts continues and is converting the museum files into a closely integrated reference to valuable medical teaching material. Over 250,000 museum items of widely assorted types have been reviewed, physically inventoried, partially indexed, and filed. Proper assignment has been made to appropriate display or storage aross. Items that wore seriously damaged by war storage, the Wainwright collection of histopathology slides, and itoms useless to current and future development of the Museum were disposed of (Exhibit 33 B). There still remains a total of 79,792 items in the working collections (Exhibit 33 A). Detailed breakdowns in both categories are available in the Museum files. The collection of basic data nocessary for the future preparation of catalogues of the various catogories of museum holdings is in process.
 - 1. The Huntington collection remains as the only lorgo collection of World War II storage still requiring detailed physical inventory, professional review, cataloguing and disposition.
 - 2. Physical inventory of historical instruments collections was completed during 1949. Professional review has been carried on as time permitted during 1950, and was still in process at year's end.
 - 3. The historical scientific date is being gradually indexed and catalogued as qualified personnel from the Information Section can provide time from more

important duties. A general indication of the contents of this file was included in the 1949 Annual Report.

- 4. The records of old specimens of the Civil Wor period are confused and incomplete. However, review of a large number of fragmented occasion books, diagnosis lists, case history books, correspondence books, and so forth, mentioned in the 1949 Annual Report, continues. In this category the Civil War bone specimens have been physically inventoried and now await professional review prior to indexing for catalogue purposes.
- 5. Review of the 168 weapons listed in the 1949 Annual Report was accomplished and these essential to historical exhibits were retained. The balance of 120 were transferred to the Smitheonian Institute.

To maintain the integrity of the locator files for the inventoried and stored items of the Museum, a continuous inventory system is being instituted. With existing personnel a period of six ments is required to complete the check on all museum holdings.

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- c. Attondanco, Accossions, Now Exhibits, Information Reloases, Loans.
 - 1. Attendanco: Normal weathering of the Museum signs, assisted by the neighborhood bad boys, exceeded construction and the Museum was without a sign from mid-June to mid-December. During these menths the public museum attendance fell in excess of 9000 from the 1949 figure to a total of 114,650. In addition there has been reported a slight decrease in museum attendance from other areas of the country.
 - 2. Accessions: Five hundred and sixty-five new accessions were received.
 - 3. Now Exhibits Information Rologos: Ovor 700 now exhibits, expressed as 4' x 6' panels, were placed on display; 5700 informational pamphlots were distributed to the visiting public.
 - 4. Loans: Over 400 museum items and 9 historical or pathological collections were loaned to departments within the Institute, Western, Southron and Midwestern medical schools, and Federal agencies for teaching, study, reference, research, and exhibit purposes.
- d. Maintenanco. For the first time since the 1947 moning of the Museum sufficient maintenance personnel has been

ossigned to keep the public displays clean, neat and orderly. Many compliments have been received, and credit is due to Mr. Robert Fletcher and his staff.

IV. LABORATORY DEVELOPMENT.

Dovelopment of a new laboratory under the supervision of Mr. Thomas N. Haviland, occupied in December 1949, was continued through 1950. Lighting and special wiring for the evens had been requisitioned during 1949 but due to difficulty in obtaining construction assistance and in obtaining and installing equipment, the laboratory was not completed until May 1950.

Devolopment of small plastic mounted gross specimen museums of specialty pathology material continues. Collections are presently available in the pathology of the atomic bomb and general pathology. Collections designed to illustrate the more special fields of pathology can be made upon request.

Facilities for training in routine and special mounting techniques are available.

Research studies in specimen proparation techniques were continued throughout the year. The primary objective in these studies is the development in natural color of plastic mounted or conted gross teaching specimens, capable of being shipped in an economical, nonbrookable manner to remote points. Progress has been made. A method has been developed for preservation of Kniserling color in plastic. Further basic work on the physics and chemistry of homoglobin and its relationship to the retention of natural color, as well as study of modern physical techniques for the preservation of tissue by interference with enzyme systems and destruction of bacteria are required. Techniques have also been developed for:

- 1. Restoration of selected desicoated tissues.
- 2. Limited application of plastic coatings to teaching specimens.
- 3. Destaining and restoring rust-covered specimens.

Studies are in progress on the application of plastic embedding, coating or packaging in polyethylane bags and carbowax coatings in the proparation of gross pathology specimens from field hospitals.

Exhibit 33 G summarizes the production for the year 1950.

V. PATHOLOGY, ANATOMY AND EMBRYOLOGY. (Dr. Henry W. Edmonds, Chiof).

Extensive contributions were made in organizing and developing the majority of the "Featured Item of the Month" exhibits (Exhibit 33 F), and preparing additional exhibits on miscellaneous items of historical value. Throughout the year professional guidance was afforded the Records, Files and Storage Section of the General

Service Division in the Processing of historic instruments, models culages, pathologic and other biologic specimens. Professional advice and guidance were also afforded the Museum Laboratory and Research and Preparation Branch in the preparation of plastic mounted gross specimens. In November the long-awaited Electromatic typewriter was received and the extensive task of relabeling the anatomical and comparative anatomy specimens was begun.

a. Advanced Teaching Laboratory: This laboratory was equipped and set in operation in July under the direction of the Chief of Pathology, Anatomy and Embryology. The laboratory is immediately adjacent to the gross specimen library for ease of transfer of teaching material. Its facilities have already been used by visiting students.

VI. SUMMARY.

The year ended with the staff moderately but insufficiently increased technically and professionally. Working conditions were improved slightly but at the loss of valuable space in Tampa Hall. The senior working force was stable, interested and, efficient but total strength for the accomplishment of anticipated programs continued inadequate. Space with proper weight bearing characteristics continues inadequate. Research activities were not up to expectations. Exhibit planning activities were slower than desired due to limitation in professional and technical staff.

Progress in overall development of the Puseum has been favorable but not as rapid as desired. Nevertheless, when the number of new exhibits and general improvement in appearance are considered in relation to the small size of the exhibit planning staff, the results have been gratifying, both to the staff and to public and professional visitors.

f. Single lantern slides, available for circulation, were consolidated in one large file area and arranged alphabetically by diagnosis. Proper markers and cross-reference cards were inserted in each drawer to expedite the finding of specific slides.

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- g. Illustration material contained in the Atomic Bomb collection was correlated with the case histories in the contral files and given an AFIP Accession number. Each case now has a controlling number, which facilitates the grouping of materials for the case.
- h. The Blackburn collection, which has long awaited complete accessioning, was processed by a todious correlation of records here at the Institute and at St. Elizabeth's Hospital.
- i. The James Moores Ball Ophthalmological collection and a considerable number of W. W. II illustrations were transferred to this division from the Medical Museum. Facial moulages (292) prepared over a period of years at Valley Forge General Hospital were received, accessioned, packed, and propored for storage, following the closing of that installation.
- j. About 8,000 negatives, the early Woodward Photographic Collection, were refiled numerically with all essential data. This action makes it again possible to use the valuable material which was gathered from 1869 to 1900.
- k. A 250 item 2" x 2" transparency dormatology set and 112 item 2" x 2" transparency mycology set were obtained on a lean basis from the University of Pennsylvania. The two collections were cataloged and reproduced for Armed Forces use and the original material was returned to the contributor. It is one of several outstanding examples of the way in which civilian medicine is cooperating with military medicine.
- 1. Copies of each official medical GTA were obtained and filed. These are exceedingly valuable, since the military situation has already required republishing action on many of the World Wer II subjects and the art work was not elsewhere available.
- m. There was a decided trend toward more and larger sets of transparencies on teaching and training subjects. With the various types of everhead projectors becoming standard equipment, the transparency rather than the slide is in greater domand. The plain transparencies are considered by most users to be an improvement ever the $3\frac{1}{4}$ " x 4" lantern slide, for initial cost is less, the items are easier to handle, there is no breakage, and normal wear and tear is kept to a minimum.
 - n. Also, the records show that the 2" x 2" transparency

SECTION V

MEDICAL MUSEUM

Henry W. Edmonds, M.D., Acting Curator

- l. FUNCTIONS: "A national institution jointly sponsored by the Army, the Navy, and the Air Force dedicated to the collection, preservation, and display of military medical material to provide instruction for the men and women of the Armed Forces, research facilities for the medical profession, and information for the public." These words, concisely expressing the functions of the department, along with the seals of the Department of Defense, the Army, the Navy, and the Air Force, are to appear on a panel to be hung early in January 1952, in the entrance hall of the Medical Museum.
- 2. ORGANIZATION: The Medical Museum is administered by a Curator, aided by an administrative assistant. The staff of the department is organized in four divisions:
- a. Pathology, Anatomy, and Embryology Division: Concerned with the professional evaluation and utilization of the medical items in the Museum collection.
- b. Historical Research Division: Activated in June 1951 and concerned with the professional evaluation and utilization of historical and archival items in the Museum collection.
- c. Laboratory and Technics Research Division: Concerned with the technical work of mounting anatomic and pathologic specimens of the Museum collection and with the testing and developing of new methods for such mounting.
- d. General Service Division: Includes all other activi-
- (1) Educational Planning and Information Branch:
 Include with the critical evaluation of the response of the
 Lie to Museum exhibits, preparation of informational releases
 the press and guide leaflets for public visitors, and educationary personnel.

 Personnel.
- (2) Records, Files, Storage, Loans, and Gifts Branch:
 Or on display, and for the maintenance of all records re-

(3) Maintenance and Assembly Branch: Responsible for the physical maintenance of Museum items, stored or on display, and for the erection and dismantling of all exhibits within the Museum.

3. PERSONNEL:

- Sloan, has been a serious loss to the Museum and to the Institute as a whole. Since June 1951, Dr. Henry W. Edmonds has served as Acting Curator.
- b. Thomas N. Haviland resigned from the Medical Museum as Chief of the Laboratory and Technics Research Division on 17 February 1951. A suitable candidate for this position has not been found.
- c. Mr. Morris C. Leikind, formerly with the Library of Congress, joined the staff on 25 June 1951, as Chief of the Historical Research Division.
- d. Dr. Carla Zaglits joined the staff in April 1951 as Chief of the Educational Planning and Information Branch, and resigned in November 1951.
- e. Captain James C. Beyer was appointed on 12 December 1951 as Assistant Chief of the Pathology, Anatomy, and Embryology Division and Chief of the Laboratory and Technics Research Division.
- f. Additional personnel will be required for optimum efficiency of the Department, which is now operating at 75 per cent of its authorized strength.

4. ACTIVITIES:

a. Prime emphasis has been placed on improvement of
the public display areas of the Museum. A new departure in exhibit presentation has been the "gallery shows" of significant
medical art. Two groups of paintings have been displayed, each
for 90 days, illustrating current activities of the Medical Corps
of the Navy in combat situations. Sketches by Frede Vidar entitled,
"Battle Against Death in Korea", were loaned by the Abbott Laboratories for showing in the Museum, and the valuable original canvases by Dean Cornwell portraying prominent figures in the history
of American medicine were similarly loaned to the Museum by the
Myeth Corporation. A special exhibit room was set up to present
current activities of the Air Force in the evacuation of the woundfrom Korea, using photographs supplied by courtesy of the Air
Force Informational Office and Flight Nurse equipment kindly loaned
by MATS, Andrews Field Air Base.

- b. Maps and directories of the exhibits have been placed at prominent points throughout the Museum. Glossaries to explain technical terms to the lay public and explanatory summaries were prepared for addition to those exhibits that were assembled primarily for professional visitors. The use of sound recordings in the Museum was explored but set aside temporarily pending solution of the technical problems of limiting the area of sound penetration and securing simple push-button operation of the sound mechanisms.
- c. The Museum was visited by 135,152 persons, an increase of 21,499 over the attendance in 1950. (see Exhibit 73) Some 200 tours of the Museum have been conducted for individuals and for 172 groups of great diversity in background and interests, personnel of the Armed Forces Medical Services, civilian doctors, and students from secondary schools and postgraduate levels. Twenty-six leaflets describing the Museum exhibits, or explaining some of the activities of the Institute and of other Armed Forces Medical Services, written by the Museum staff, have been distributed in 33,850 mimeographed leaflets to both lay and professional visitors. Fifteen of these leaflets were written during 1951. The leaflets, "Legacy to Life (Value of the Autopsy)" and "Human Heart", have been in greatest demand, over 3,800 of each being distributed in a 12month period. The leaflets on "Yellow Fever" and "Military Medicine" hold the next highest place in order of distribution, over 3,000 having been distributed during the year. The Museum has also made available to the public, printed informational pamphlets of the Departments of the Army and Air Force, the U.S. Public Health Service, the Civil Defense Administration, and the National Foundations for Cancer and for Poliomyelitis. (See Exhibit 74)
- d. Public showings of medical educational movies,

 thown on Sunday afternoons (summer months excepted), have been to rell attended (1,430 persons). The moving picture program series, that during 1950, has been continued. The addition of a projector and full-size screen, to replace the admatic machine used to the effectiveness of this program audiences have reached the capacity of the available lecture room, 50 to 60 people, 2 showings each Sunday were started pecember. Members of the Museum staff have served in rotation makes ends as guard-guides and picture projectionists. Since to been, projectionists have been furnished by the Medical Illustration Service. (see Exhibit 75)

- e. One of the exhibit halls was equipped for temporary conversion to a lecture room. This hall was used not only for the week-end showings of motion picture films, but also by other departments of the Armed Forces Institute of Pathology and of the Army Medical Library. Use of this room for such purposes has been scheduled formally, in liaison with the Training Branch, Pathology Division. Such use has been held to a minimum since it necessitates the withdrawal of the room from ordinary display functions.
- f. Efforts to secure greater interest in the Museum on the part of special groups of individuals have included the selection and display of a group of medical science exhibits prepared by local high school students for the fifth annual National Science Fair competition. An outstanding collection of stamps, documented to illustrate the history of medicine, was loaned to the Museum by Dr. Karl F. Meyer of San Francisco and displayed in 9 monthly installments. Over 600 visitors have requested the various leaflets describing this collection. (see Exhibit 76)
- g. Two hundred seventy—three Museum items have been circulated on short—term loans to doctors, medical schools, and Armed Forces installations for exhibit, for teaching, and for preparation of medical films and television broadcasts. (see exhibit 77) Eighteen doctors preparing for certification by national specialty boards have availed themselves of the study facilities of the gross specimen collections in the Museum. Orientation tours of the Museum were given to 20 groups of Medical Officers assigned to the Armed Forces Institute of Pathology. Dr. Norma Ford Walker of Toronto, Canada, has completed dermatoglyphic studies of the rare set of mummified quintuplet infants in the possession of the Museum research made possible by chemical softening of the dried bodies by the Museum Laboratory.
- h. Among some 450 new Museum items received during
 1951 are included anatomical models given by the Library of
 Congress, a collection of mounted veterinary gross pathologic
 Specimens from the Bureau of Animal Industry of the Department of
 Agriculture, and some captured North Korean medical field equipment. Identification and indexing of the old medical instruments
 in the collection of the Museum has required much time. Review
 of the collection of coins and medals of medical interest has
 begun. During the summer, a temporary worker was employed to
 catalog a part of the Huntington collection of comparative anatomic
 specimens.
- 1. Professional studies by the Museum staff have inthe preparation of biographical papers on Hammond and on the compilation of vocabularies of medical terms obscure to laity, and the improvement of methods of wet-mounting gross linens in plastic containers.

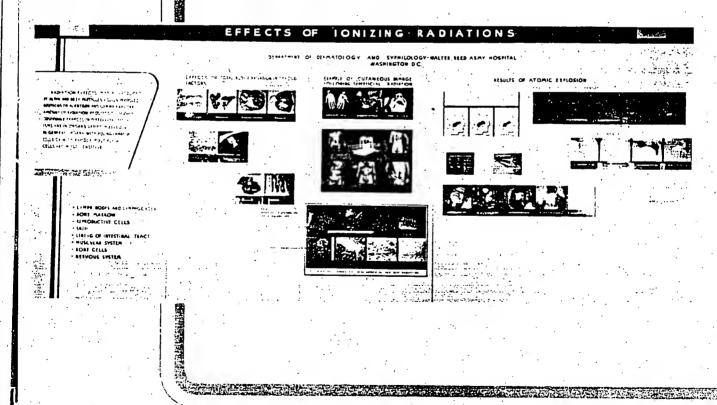
j. The Museum Laboratory, without a chief since February 1951, has carried on both routine and research projects under the direction of the Curator's Office. Two hundred sixty-four visitors have been given brief periods of instruction in plastic embedding and fabrication of plastic boxes. Ninety-eight specimens have been mounted in plastic boxes and 116 specimens embedded in plastic.

k. Space adjustments were made to allow room, first for the Air Forces exhibit previously described, and second for the installation of the I.B.M. Unit of the Statistical Section of the Pathology Division, Armed Forces Institute of Pathology, in the Museum building. The readjustments for the latter move were particularly extensive.

l. Arrangements were made with Dr. Arthur R. Turner of Medical Intelligence, Surgeon General's Office, for all current captured medical implements to be sent to the Medical Museum. The understanding is that the Museum will retain only those items deemed suitable for its collections, all other material to be destroyed after identification data have been recorded by the Museum for Dr. Turner.

Armid Reject 1950





- Surgeon J. J. Woodward, U.S. Army Pioneer in Photomicrography
- 2. An Exhibit

 Designed and Produced by

 Medical Illustration Service

MEDICAL MUSEUM

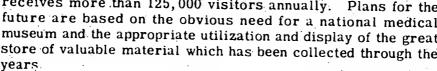
The Army Medical Museum was the parent organization of the Army Institute of Pathology, which developed into the Armed Forces Institute of Pathology. It was established during the Civil War to house specimens of gunshot wounds and other war injuries that were collected for the instruction of Army surgeons. In the course of time the Medical Museum has grown to be one of the largest of its kind in the world. The exhibits illustrate not only wounds of war, but also representative specimens of all the diseases that afflict man and the animals of use to man.

Instruments which have contributed to the progress of medicine are also on display, and the outstanding collection of microscopes contains examples of all types from the earliest to the most modern. Ophthalmoscopes, stethoscopes and other diagnostic instruments are exhibited to emphasize their historic significance. Of especial interest to the lay public are the comprehensive collections of coins, medals, and stamps commemorating great figures or events in medicine and its allied professions. Although Europe has had several notable medical museums open to laymen, the Medical Museum of the Armed Forces Institute of Pathology is the only one of its type in the United States which admits the general public.

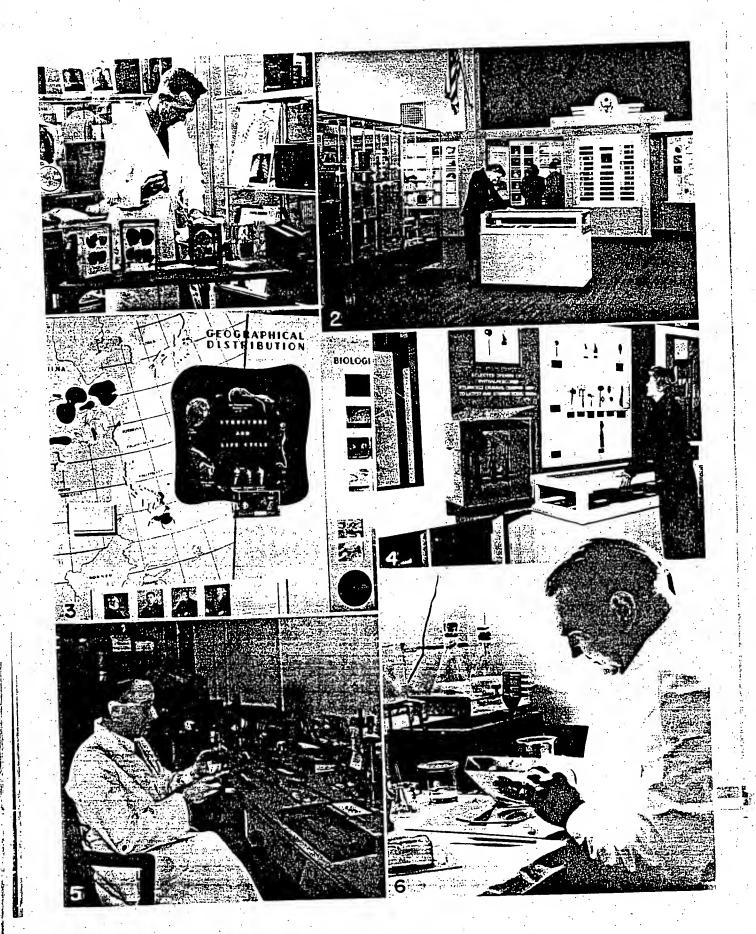
Laboratories have been established for the care of specimens and the investigation of museum techniques and methods of plastic protection for the display and preservation of material.

New displays are being designed to afford visitors an opportunity to take maximum advantage of the store of interesting material on exhibit. Plans are being made for the division of the present collection into three major components: a Medical Science Museum, an Advanced Teaching Museum, and a Public The Medical Science Museum is in the early phase of a reorganization program which will ultimately provide adequate facilities for officers of the Armed Forces, professional personnel of other Federal services, civilian physicians, scientists, and medical students who supplement their education by studying exhibits illustrating diseases, wounds, and injuries, preventive medicine, comparative anatomy, embryology, and the history of advances in military medicine and the allied sciences. For extensive study and review in the pathology of disease by advanced students and specialists in the field of pathology there will be the Advanced Teaching Museum. It will be so equipped that the users may study case records and histopathology in conjunction with the gross museum specimens. In the Public Museum, the exhibits are planned to be of educational value to nonprofessional visitors. Emphasis will be placed on the contributions of the Armed Forces to the health and welfare of the nation. These exhibits will be altered from time to time to meet changing concepts.

Even with its present limited facilities the Medical Museum receives more than 125,000 visitors annually. Plans for the future are based on the obvious need for a national medical museum and the appropriate utilization and display of the great store of valuable material which has been collected through the







SECTION VII

MEDICAL AUSEUM

Hugh R. Gilmore, Jr., Col. M. C., Curator

- 1. ORTANIZATION & FUNCTION: See chart on opposite page.
- 2. STAFF CHANGES: Col. Turk R. dilmore, Jr., reported for duty, 5 January 1953, to take up his duties as Curator of the Medical Museum. In February, Captain Bernard Sills was assigned to the Museum as Chief of Laboratory and Techniques Research. Unit and in April was named Chief of the Pathology Unit of the Professional Section of the Medical Museum, in addition to his other duties. Captain James C. Beyer, was relieved of duties in the Museum Laboratory in April and assigned to the Wound Ballistics Section. In June, because of a reduction in force program, seven positions were cancelled. Miss Helen R. Purtle was named assistant to the Curator in August.

There were two resignations during the year: Mr. Philip Joram, a member of the laboratory staff for 3 years and Mrs. Evelyn Drayton, Information Specialist for the Museum since April 1950.

3. ACTIVITIES:

- a. Throughout the year the existing backlog of current gross material and material stored in the warehouse was reviewed, and items were selected for mounting and subsequent museum display. Study and mounting of gross material collected in Korea is in process. Review of the Huntington Anatomical Collection, in the Museum since 1937, has again been interrupted because of Captain James C. Beyer's reassignment to the Yound Ballistics Section. However, some progress was made in this review and classification. Selected items were sent to Yale University School of Medicine, and other items were selected for exhibit in the Museum. Continuation of the review of this collection must await the assignment of an anatomist. Activity in items received, loaned and disposed of remained constant throughout the year (See EMHIBIT 34, 35, 36).
- b. A new activity of the Museum was the initiation of weekly gross pathology conferences conducted by members of the AFIP staff and by visiting consultants.

c. The laboratory has made considerable progress in mounting methods under the guidance of Captain Bernard Sills. Experimental studies, both in methods and materials, have resulted in restoration and retention of natural color and elimination of cloudy fluids, reduction in preparation time and improved fabrication procedures. Material has been prepared for exhibition at national medical meetings and has been well received. A preliminary report of the use of various plastics is in process. Because of lack of personnel, the routine processing of specimens has not kept pace with the experimental work.

4. COLLECTIONS:

- a. The Museum collection of stamps of medical interests was reviewed, classified and catalogued. Review and cataloguing of the medical medals continued throughout the year. A preliminary catalogue of urological instruments, many contributed by the American Prological Association, was prepared and sent to Dr. Fontague Boyd of the Association for review and criticism. It is hoped that this catalogue will ultimately be published.
- b. A review has been made of the duplicate instruments set aside for disposal and a list prepared and presented to interested members of the Scientific Advisory Board. As a result, many of the instruments have been sent to medical schools and other governmental agencies for exhibit purposes. It is felt that the usefulness of this duplicate material would be enhanced by preparing loan exhibits which would be available to medical schools, hospitals, and other governmental agencies.
- c. Colonel Weller of Walter Reed Army Medical Center devoted considerable time in reviewing and classifying the World War I moulages in the Museum's collection.
- d. Twenty-five new exhibits were developed by members of the staff for display in the Museum and/or for national medical meetings (See EXHIBIT 32). An exhibit on Amebiasis, prepared by Dr. Frnest Carroll Faust and Captain George Nicholson was shown at the 1953 meeting of the AMA. "The Development of the X-Ray", exhibited at the X-Ray Technologists 1953 meeting, was presented on a local television program, and is presently on display in the Science Museum in Boston. After the Boston showing, it is scheduled to go to the Cleveland Health Museum, the auseum of Science and Industry in Chicago and the Lakenau Hospital suseum in Amiladelphia.

The exhibit on Abraham Lincoln, prior to being shown in the museum, was televised from New York City.

assigned to the Museum for display of exhibits. It is hoped that this program, temporarily discontinued because of lack of

space, will be continued and, if possible, expanded.

f. Arrangements were made with the Historical Section of the Army for the loan of World War II and Korean paintings. At year's end 40 such paintings were hung in the Museum.

g. Members of the Museum staff worked closely with the Technical Information Office of the AFIP in developing radio and television programs, newspaper releases and pictorial stories for pharmaceutical house organs, and have appeared on both radio and television programs. Many scenes from the film "Born in the White House" were taken in the Medical Museum by the photographic staff of the National Foundation for Infantile Paralysis. A copy of the film was presented to the AFIP. Assistance was given to the asnington Heart Association in the revision of their exhibit on Heart Disease, and to the American College of Cardiologists in the selection and preparation for an exhibit on the Development of Cardiac Diagnosis. As the result of this latter meeting, the Museum was asked to prepare an exhibit on the History of Tuberculosis for the 1954 meeting of the National Tuberculosis Association.

The Museum slso supplied judges for the annual Junior Science Fair, who assisted in the selection of prize winning exhibits on the basis of originality, completeness and accuracy. Ten of these exhibits were later displayed in the Museum.

h. During 1953 the Museum had 145,532 visitors, an increase of 2603 over the 1952 attendance. This includes 685 school groups, totalling 25,664 students, an increase of 195 groups and 8691 students over the preceding year (See EXHIBIT 31). Orientation tours for medical corps officers and conducted tours for lay groups continued to play an important part in Museum activities.

The featured item of the week, the Sunday motion picture, has been attended by capacity audiences. It is unfortunate that this particular program has to be discontinued due to summer heat at the height of the visitors season.

- (1) Colonel Gilmore presented papers on Abraham Lincoln and Epidemic Hemorrhagic Fever before the Royal College of Surgeons in London in September. He also spent sometime visiting blueeums in Paris and in London.
- 5. CONSELTANTS: Dr. Ernest Carroll Faust had two tours of duty in 1953. Aided by Captain George Michelson final plans were made on the Amediasis exhibit. This was shown at the annual maeting of the A. M. A. Preliminary plans were drawn up for an exhibit on Arthropods as Agents and Transmitters of Human Disease. Lt. Hamilton of the AFIP was assigned to work with Dr. Faust on this exhibit.

Harrice Reford FISH

MEDICAL MUSEUM

Hugh R. Gilmore, Jr., Col., MC → Curator

1. AIMS AND FUNCTIONS.

The Medical Museum, a department of the Armed Forces Institute of Pathology, is dedicated to the collection, preservation and display of military-medical material for the education of the members of the Armed Forces and the lay public. With the opening of the new building, the functions of the Museum will be divided. The professional museum will be located in the new building, where mounted and unmounted pathologic gross specimens will be available to doctors for study. The museum laboratory will also move to the new building. The public museum will remain in its present location.

2. STAFF CHANGES.

Mr. Robert Walker Davis, Research Assistant to the Medical Historian and-Mr. James B. Smith, Jr., a laboratory aid, were added to the staff during the year. Lt. Samuel W. Kime, Jr. replaced Captain Bernard Sills at year's end, as Chief of the Laboratory and Technics Research Branch.

3. ACTIVITIES.

- a. Continuous progress has been made in planning and/or revising the Medical Museum exhibits. An exhibit on the "History of X-ray" was shown at the Science Museum, Boston; the Cleveland Health Museum, Cleveland; the Museum of Science and Industry, Chicago and is presently on display in the Lankenau Hospital Museum in Philadelphia. The "History of Tuberculosis" exhibit was prepared at the request of the National Tuberculosis Association, for the annual meeting in Atlantic City. The "Use of Polyethylene Glycol in Mounting Biologic Specimens" was displayed at the annual meeting of the American Medical Association. Gorgas memorabilia, donated by Mrs. Wrightson, daughter of General Gorgas, have been placed on display. Plaques of "Pioneers in Medicine" contributed to the Medical Museum by Tufts Medical School Alumni, in memory of their war dead, were formally unveiled on 28 October. "Distinctive Tumors of the World" prepared for maeting of the International Congress of Clinical Pathologists was later exhibited at the University of Pittsburgh Medical School. A new departure for the Medical Museum was exhibiting at a county fair. A 60 foot hospital tent was procured from Fort Belvoir and historical and veterinary exhibits were displayed. An estimated 500 to 750 persons visited the tent daily. Special exhibits were prepared and displayed in the Museum for the Cured Cancer Club of Washington, The American Legion and the 4th World Congress of Cardiologists.
- b. Displayed throughout the year were many guest exhibits from various agencies such as Department of the Army, Department of the Navy, National Institutes of Health, Armed Forces Medical Library, Smithsonian Institute, Veterans Administration, Baylor University College of Medicine, American Cancer Society, Washington Heart Association, National Foundation for Infantile Paralysis and Pecker X-Ray Corporation.
- c. Duplicate instruments were donated to the Beaumont House, Mackinanc Island, Michigan, to be incorporated in permanent exhibits. Medical Museum items have been loaned, on a 90-day loan basis, to Dr. Max Thorek for display in the Hall of Fame, Chicago. Mr. Tom Jones, University of Illinois, has long been interested in a midwestern branch of the Medical Museum. He now feels that the Hall of Fame could serve this purpose, and he has requested consideration of long-term renewable loans to the Hall of Fame. Seventy-due (71) museum items have also been loaned to Medical Schools, hospitals, television production companies, pharmaccutical houses and other governmental agencies for teaching, study and/or display.
- d. The Museum laboratory made considerable progress in mounting and embedding specimens in plastic. An active research program was instituted to determine better methods of preserving tissue. Exhibits were prepared and shown at national medical meetings throughout the year.

e. A total of ninety-nine (99) new items were accessioned. They included urological, surgical and dental instruments, as well as gross tissue and historical items from the following contributors:

Organizations

Winthrop-Stearns
Tufts Alumni College
Tripler Gen. Hospital
Smithsonian Institute
Walter Reed Army Medical
Center
Presbyterian Hospital
American Urological Society

Individuals

H. Burleson
Dr. W. W. Francis
Mr. F. L. Mickle
Dr. H. R. Eaney
Mrs. R. C. Eisenbach
Colonel Bitner
Dr. V. C. Lazarus
Mrs. James Phalen
Dr. G. W. H. Selepers
M/Sgt. A. Cortizas
Mrs. Edwin B. Behrend

- f. The Museum was fortunate in procuring a trained historian and philatelist as research assistant to the Medical Historian. This has allowed the Medical Historian more time to devote to the preparation of lectures and historical articles. Review and organization of the old Museum Archives has been started. Work on the preparation of the History of the Medical Museum is in process. A bibliography of AFIP scientific publications is being assembled, and a biographical data file on members of the staff of the AFIP is being developed. Lectures have been given at Howard University School of Medicine, Catholic University and Walter Reed Army Medical Center. Historical articles have been published on the AFIO, the History of the Stethoscope and William Crawford Gorgas. Review, classification and cataloguing of the Museum's collections has continued throughout the year.
- g. Early in 1954 a questionnaire was prepared and an answer box installed to determine the occupations of Museum visitors and their reaction to existing exhibits.

 Fourteen-percent of the visitors responded. An analysis of the questionnaire has shown that 42.9% were teachers and students and 30.5% were doctors, dentists, nurses and others with a scientific background. The remaining 26.6% were of diversified occupations. Favorable comments on museum displays were clicited by 88.5%, 6.3% gave both favorable comments and constructive criticism, while the remaining 5.4% made insignificant remarks. A student nurse from Georgetown University Hospital, School of Nursing was the one millionth recorded visitor to the Medical Museum since its opening in Chase Hall in April 1947. The overall number of visitors dropped slightly, but there was a noticeable increase in the number and size of the school groups. Orientation tours for Army, Navy and Air Force medical corps officers continued throughout the year. An average of 3500 mimeographed leaflets, prepared by the Museum staff, were distributed to visitors. In addition, pamphlets were received from other governmental agencies for distribution. Sunday motion pictures have been shown from October through May to capacity audiences.

4. CONSULTANTS.

Dr. Ernest Carroll Paust had two tours of duty in 1954. With the assistance of Dr. Paul K. Hamilton, he planned a 321 exhibit on "Arthropods in Disease". This was shown at the International Congress of Clinical Pathologists in September.

5. FUTURE PLANS.

Plans are now in process for opening up the first floor of Chase Hall for additional display area. Plans have been submitted for the construction of display cases and permanent bases for panel exhibits. In this way all valuable Medical Museum items can either be displayed or safely stored.

TECHNICAL LIAISON OFFICE

Mary Elevanian

Capt. Ralph O. Anderson, Jr., MSC

1. The Technical Liaison Office was transferred from under the Special Assistant to The Director on 30 June 1954 and was placed under the Medical Museum, Administrative Division, TLO Branch.

Lt. John F. Cronin departed 1 February 1954 and Captain Ralph O. Anderson, MSC was assigned Technical Liaison Officer, 22 February 1954. Sgt. Leo Kaye was assigned to the TLO 22 July 1954. Mrs. Ola Schinke departed 30 July 1954 and Miss Babette E. Dabbs was assigned to TLO 27 July 1954.

- 2. A great many of the projects and activities of the TLO during the year 1954 were correlated with the impending completion of the new AFIP building. This office initiated and assisted in news and magazine stories which publicized AFIP in all parts of the world.
- a. During 1954 liaison was established with the United States Information Agency so that the work of AFIP and its foreign students have been given great publicity through USIA channels, including The Voice of America, throughout the world.
- b. To keep pace with the growth of television as a medium for education and entertainment, the TLO has increased its activities in that direction. Approaches to network television programs are in the planning stage, while a four program series featuring one of AFIP's enlisted men was well received in the Washington area. General Elbert DeCoursey participated in two television shows and his speech before the opening session of the George Washington University Medical School was broadcast nationally over the Columbia Broadcasting System.
- c. To further inform the men and women of the Armed Services of the work of the AFIP an article was prepared by this office and accepted for future publication in the Army Information Digest.
- 3. In the Troop Information and Education Programs, this office obtained speakers from many well known Washington Public Relations figures, the Coast and Geodetic Survey, the Federal Bureau of Investigation, Time, Inc., and a great many others.
- 4. Five "AFIP Letters" were published and distributed during the year. These letters are professional in nature and have wide distribution to the medical profession, both military and civilian.
- a. A total of ninety-two press releases were sent out by the TLO to news-papers, scientific journals, service journals, magazines, etc.
- b. One hundred stories appeared on the AFIP or the AFIP personnel in various newspapers, magazines, scientific journals, service journals, and other press media for the year 1954.

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FUNCTIONAL CHART MEDICAL MUSEUM

195

CURATOR'S OFFICE

Directs overell activities of Medical Museum

MOISIVIG SVITASTRIBUGA

Records, Files and Storage: Malatains all records and files pertataing to cincelfication location, sods and transfer of Museum. Items; accessions current acquisitions of Russem Items to current accessioning system; reviews and classifies Buseum Items.

Enistenance: Erects and dismastles exhibits; cleans exhibits, exhibit cases and display ares.

SISTORICAL RESEARCE DITISION

Prepares historical articles on Hedical Basesm and other departments of AFIP; collects and shatments historical data; mistains Basesm archives; prepares historical exhibits; historical advisor to all divisions of the Hedical Basesm.

PROFESSIONAL DIVISION

Pathology: Collects and dissects freeh gross speciessa; reviews gross material in Bedical Essess and other AFTP collections, selects material for study by medical officers and civilian doctors is preparation for spectalty beard examination; prepares gross pathology loss sets; prepares exhibits' for matienal sectings.

Anntony-Embryology: Reviews and olsselfies Bedinal Basem's collection of comparative anatomy; selects and prepares anatomical anterial for display and instruction.

Laboratory & Technique Research: Prepares and mounts all gross pathologizal material received to Emdical Ensemm; conducts research to improve mounting mathods; fabricates plastic boxes for epecimene; prepares axhibits.

EDUCATION DIVISION

illustration: Prepares drawings, paintings and sculpture items to supplement these metablits.

Information: Propurse informational lesflets on Museum activities and exhibits propurse illustrated lectures and provision guide service for lay group; prepares catalogues of selected Museum collections.

MEDICAL MUSELM

MUCH P. G. MOREY R. COL., MC

. ORGANIZATION.

The transfer of the state of th

THE PUBLIC MUSEUM AND STORAGE AREA IS LOCATED IN CHASE HALL AT 9TH AND INDEPENDENCE AVENUE, S. W. AND A SMALL PROFESSIONAL MUSEUM IS IN THE NEW BUILDING AT WEAM. L'ALSO IN THE NEW BUILDING IS THE MUSEUM LABORATORY WHERE GROSS SPECIMENS ARE MOUNTED AND THE STORAGE AREA FOR "CROCK" SPECIMENS. THE HISTORICAL DIVISION'S DIVIDED BETWEEN THE TWO BUILDINGS.

2. PLRSONNEL.

COLONEL HUGH R. GILMORE, P. CURATOR OF THE MEDICAL MUSEUM. DIVIDES HIS TIME BETWEEN THE PROFESSIONAL MUSEUM AND THE PUBLIC MUSEUM. HELEN R. PURTLE, ASSISTANT TO THE CURATOR, IS ASSIGNED FULL TIME DUTY IN THE PUBLIC MUSEUM. CAPTAIN S. W. MIME. CR. IS CHIEF OF THE PATHOLOGY BRANCH AND IN CHARGE OF THE MUSEUM LABORATORY AT THE NEW BLILDING. M/SP. ANTONIO CORTIZAS WAS ASSIGNED TO ACTIVE DUTY IN THE MUSEUM IN FEBRUARY 1955. M/SGT LILLIAN E. DAVIS REPORTED FOR ACTIVE BULY AS INFORMATION OFFICER ON 28 APRIL 1955. REPEACING MRS. MIPHAM BAISER WHO ACCEPTED A POSITION AS A MEDICAL WRITER WITH THE SHARPE & DOHME COMPANY. JAFTAIN HOMAS C. BROOKS, MEDICAL LLUSTRATOR, WAS RELEASED FROM ACTIVE DUTY IN UNIT STON OF MUSEUM ACTIVITIES BETWEEN THE TWO LOCATIONS BEGLIRED THE EMPLOYMENT, IN MARCH, OF A CHERK-TYPIST FOR THE PUBLIC MUSEUM AND IN NOVEMBER 4 NON COMMISSIONED OFFICER WAS ASSIGNED TO THE PUBLIC MUSEUM AS A GENERAL UTILITY MAN TO PERFORM SOME OF THE REPAIR TASKS FORMERLY CONE BY THE MEDICAL ALLOSTRATION SERVICE. STILL URGENTLY NEEDED BY THE MUSEUM IS AN ARTEST TO BEFLACE CARTAIN BROOKS AND A CLERKETYPIST FOR THE MUSEUM LABORATORY.

DEVELOPMENTS.

A. WITH THE MOVE OF THE ARMED FORCES INSTITUTE OF PATHOLOGY TO ITS NEW BUILDING, THE MEDICAL MUSEUM WAS ASSIGNED ALL OF CHASE HALL. THE ENTIRE STORAGE AREA WAS MOVED TO THE REAR OF THE BUILDING AND THE FRONT HALF WAS PREPARED AS AN EXHIBIT CASES WERE PURCHASED. WITH THIS ADDITIONAL DISPLAY SPACE MOST OF THE VALUABLE AND TRREPLACEABLE ITEMS THAT HAVE BEEN IN FOOTLOCKER STORAGE FOR THE PAST 8 YEARS FILL BE ON DISPLAY AREA WAS PAINTED DURING THE VERY CASE BASES. THE FIRST TIME SINCE THE BUILDING WAS OCCUPIED IN 1947.

B. ALLATE THE CENTERY OFFICE PASS BEEN SIT UP IN ONE OF THE EXHIBIT ROOMS, AND FLANS ARE UNDER WAY FOR AN DESTRUCT ROOM, WHICH WILL FEATURE THE CONTRIBUTIONS WHICH ER. I'AMES MOORES BALL MADE TO THE MUSEUM IN 1928. AN EXHIBIT ON PRIMITIVE WARRARE SAS PRECARD FOR THE FIRST FLOOR FOYER. FOR THIS EXHIBIT ON ADDITIONAL MATERIAL WAS OBTAINED FROM THE BUREAU OF INDIAN AFFAIRS, THE NATIONAL GEOGRAPHIC SOCIETY AND THE SMITHSONIAN INSTITUTION. FIGHT BACKGROUND TRESSTRATED PANELS WERE PREPARED BY THE MUSEUM'S MEDICAL ARTIST, FOR AN EXHIBIT ON "EMMAN REPRODUCTION." AND ONE EACH ON "ENDOCRINE GLANDS," "SURGICAL DELIVERY" AND "VACUUM EXTRACTORS." HISTORICAL EXHIBITS

WERE PREPARED AND SET UP IN THE 36 NEW EXHIBIT CASES. SEVENTEEN EXHIBITS WERE PREPARED AND SET UP IN THE "SHOW LINDOWS" IN THE NEW BUILDING IN TIME FOR ITS DEDICATION IN MAY. AN EXHIBIT, "DEVELOPMENT OF INSTRUMENTS FOR TRANSURETHRAL OPERATIONS OF THE FROSTATE" WAS PREPARED FOR THE ANNUAL MEETING OF THE AMERICAN UROLOGICAL SOCIETY.

- C. SEVENTY-FIVE EXHIBITS HAVE BEEN DEVELOPED. REVISED OF RELOCATED BY THE MUSEUM STAFF DURING THE TEAR. A REVIEW WAS MADE OF PATHOLOGIC SPECT.

 MENS IN THE MUSEUM AND 200 SELECTED FOR DISPLAY IN THE PROFESSIONAL MUSEUM IN THE NEW BUILDING; 80 SPECIMENS HAVE BEEN REMOUNTED IN PLASTIC JARS: ADDITIONAL LEAFLETS FOR DISTRIBUTION TO VISITORS HAVE BEEN WRITTEN; MORE INFORMATIVE LABELS HAVE BEEN PREPARED FOR NEW AND EXISTING EXHIBITS: AND THE PREPARATION OF TITLES FOR CASE EXHIBITS HAS BEEN STARIED.
- ELECTRON MICROSCOPE WHICH WAS PURCHASED BY ADOLPH HITLER FOR HIS PERSONAL PHYSICIAN, THEODORE MORRELL, AND DONATED TO THE MUSEUM BY THE SIGNAL CORPS WHO CONFISCATED IT IN GERMANY DURING WORLD WAR TO THE POSSIBLE FROM ADDED BY PFC. JOSEPH SANCHEZ WHILE A PRISONER-OF WAR IN THE POSSIBLEPINE ISLANDS AND PRESENTED TO THE MUSEUM BY MR. JOSEPH ADESKI: A SET OF AUTOFSY INSTRUMENTS WHICH HAD BEEN THE PERSONAL PROPERTY OF DR. CORNIL WHO MADE THE HISTOLOGIC STUDIES OF JOHN PAUL JONES, PRESENTED TO THE MUSEUM BY HIST GRANDSON, DR. ROBERT MESSIMY, THROUGH DR. WILLIAM, ELDMAN: 35 SETS OF MODELS AND CHARTS.
- THROUGHOUT THE YEAR. THESE WERE ON LOAN FROM THE ARMY. NAVY. NATIONAL INSTITUTES OF HEALTH. SMITHSONIAN INSTITUTION AND THE AMERICAN MEDICAL ASSOCIATION. SEVERAL OF THE EXHIBITS OF THE MONTH GEVELOPED BY THE ARMED FORCES MEDICAL LIBRARY HAVE ALSO BEEN SHOWN IN THE MUSEUM. TEN EXHIBITS SELECTED FROM THE FUNIOR SCIENCE FAIR WERE DISPLAYED HERE DURING FAE MONTH MAY. A MODEL OF THE SUBMARINE "NAUTILUS" HAD. ITS FIRST SHOWING IN THE MUSEUM IN SEPTEMBER.
- E. ORIENTATION TOURS WERE GIVEN TO MEDICAL OFFICERS, MEDICAL TECHNICIANS AND NURSES FROM THE ARMY. NAVE AND AIR BORCE. THE MEDICAL TECHNOLOGISTS OF WASHINGTON AND THE CHEED CANCER CLUB EACH HELD ONE OF THEIR REGULAR MONTHLY MEETINGS AT THE MUSEUM, FOLLOWING WHICH THEY WERE GIVEN TOURS. THE MOTION PICTURE PROGRAM FOR THE 1955-56 SEASON WAS A SERIES OF FILMS BORROWED FROM THE ATOMIC ENERGY COMMISSION, ON THE APPLICATION OF ATOMIC ENERGY IN THE FIELD OF SCIENCE.

- BECAUSE OF THE CONSTANT REQUESTS FOR PASCICLES. PERMISSION WAS RECEIVED FROM THE AMERICAN REGISTRY OF PATHOLOGY TO HAVE THESE AVAILABLE AT THE INFORMATION DESK AT THE FUBLIC MUSEUM DOWNTOWN. AT YEAR'S END, 194 FASCICLES HAD BEEN SOLD.
- E. DURING 1955 THE PUBLIC MUSEUM HAD 177,005 VISITORS THE LARGEST YEARLY FIGURE ON RECORD. 1-15 INCLUDES 807 SCHOOL GROUPS FROM 33 STATES, TOTALING 27,892. CONDUCTED TOURS OR ASSISTANCE WERE GIVEN TO THE MAJORITY OF THESE GROUPS. OVER 200,000 LEAFLETS DESCRIBING MUSEUM EXHIBITS

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G. THE SMALL PROFESSIONAL CORNELL MUSEUM IN THE NEW BUILDING COMPRISES OVER 400 SPECIMENS, ALL MOUNTED IN PLASTIC. THE MUSEUM LABORATORY HAS DEVISED A METHOD OF DISPLAYING COLOR TRANSPARENCIES, UTILIZING A MIRROR IN A SMALL VIEW BOX. THIS PERMITS SHOWING A PHOTOMICROGRAPH ALONGSIDE A GROSS SPECIMEN.

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- H. MARION WILCOX AND PFC. NORMANDIN OF THE LABORATORY STAFF HAVE DEVEL-OPED A METHOD OF EMBEDDING BRAIN SECTIONS WHICH PRESERVES THE CONTRAST BETWEEN THE GRAY AND WHITE MATTER MUCH BETTER THAN PREVIOUS TECHNICS.
- 1. A TOTAL OF 516 SPECIMENS WERE MOUNTED IN 1955, AS COMPARED TO 333 IN 1954. Use of crock specimens has increased due to the location at Walter Reed ARMY Medical Center. Almost 500 of these specimens were made available to visting doctors since the move. Visitors to the laboratory totaled 932 from June through December 1955.

4. INTRA AND INTERSERVICE COOPERATION.

- A. THE MEDICAL MUSEUM LOANED ITEMS TO VARIOUS ARMED FORCES AGENCIES AND INDIVIDUALS FOR EXHIBIT AND STUDY PURPOSES. LOANS WERE ALSO MADE TO VARIOUS CIVILIAN AGENCIES INCLUDING THE HALL OF FAME OF THE INTERNATIONAL COLLEGE OF SURGEONS, THE UNIVERSITY OF ILLINOIS MEDICAL SCHOOL, ARLINGTON COUNTY SCHOOLS AND TO OTHER SCHOOLS AND HOSPITALS. EXHIBITS WERE SHOWN AT BOTH THE MONTGOMERY AND FAIRFAX COUNTY FAIRS. ASSISTANCE WAS GIVEN TO REPRESENTATIVES OF THE PARKE DAVIS COMPANY, SHARPE AND DOHME, ABBOTT LABORATORIES AND PRIZER LABORATORIES IN THE PREPARATION OF ARTICLES RELATED TO THE HISTORY OF MEDICINE. LOANS TO THESE VARIOUS AGENCIES AND INDIVIDUALS TOTALED 56.
- B. SEVENTY-FIVE VISITORS FROM 3! COUNTRIES SIGNED THE GUEST BOOK AT THE PUBLIC MUSEUM. MOST OF THESE FOREIGN VISITORS WERE PHYSICIANS.

5. PROFESSIONAL MEETINGS.

- A. THE CURATOR GAVE A BRIEF TALK AT THE DEDICATION OF THE HALL OF FAME IN CHICAGO AND PRESENTED EXHIBITS AT THE MEETINGS OF THE INTERNATIONAL ASSOCIATION OF MEDICAL MUSEUM AND THE ASSOCIATION OF PATHOLOGISTS AND BACTERIOLOGISTS IN HOUSTON, TEXAS AND AT THE AMERICAN MEDICAL ASSOCIATION IN ATLANTIC CITY. HE ALSO SERVED ON THE EXHIBIT COMMITTEE OF THE AMERICAN SOCIETY OF CLINICAL PATHOLOGISTS AT THEIR MEETING IN CHICAGO.
- B. CAPTAIN KIME, IN CHARGE OF THE MUSEUM LABORATORY, GAVE A TALK TO THE WASHINGTON CHAPTER OF THE AMERICAN SOCIETY OF MEDICAL TECHNOLOGISTS ON MUSEUM TECHNICS.
- C. MR. LEIKIND, HISTORIAN, GAVE A COURSE OF 8 LECTURES ON MEDICAL HISTORY TO THE STAFF OF THE ARMED FORCES INSTITUTE OF PATHOLOGY AND MADE THE FOLLOWING PRESENTATIONS:
 - (1) "THE CONTRIBUTIONS OF THE MICROSCOPE TO BIOLOGY AND MEDICINE." WASHINGTON BRANCH, SOCIETY OF AMERICAN BACTERIOLOGISTS.
 - (2) "Early Work in Bacteriology at the Army Medical Museum."
 Washington Branch, Society of American Bacteriologists.

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- (3) "BACTERIOLOGICAL WORK OF JOHN TYNDALL."

 INSTITUTE OF MICROBIOLOGY, RUTGERS UNIVERSITY, NEW BRUNSWICH, NEW JERSEY.
 - (4) "THE SCIENTIST TAKES A CHANCE THE ROLE OF CHANCE IN SCIENTIFIC DISCOVERY."

 CHEMICAL SOCIETY OF TRINITY COLLEGE, WASHINGTON, D.C.
- (5) HE ALSO PARTICIPATED IN THE CONFERENCE ON THE HISTORY OF ANTIBIOTICS AT THE NEW YORK ACADEMY OF MEDICINE AND ATTENDED THE MEETINGS OF THE HISTORY OF SCIENCE SOCIETY IN WASHINGTON, D.C.

6. TRAINING.

THE MUSEUM LABORATORY HELD MONTHLY TECHNICAL CONFERENCES FOR TRAINING OF LABORATORY PERSONNEL. TEACHING MATERIAL WAS LOANED TO WALTER REED ARMY HOSPITAL FOR TRAINING OF RESIDENTS. GROSS SPECIMENS WERE ALSO MADE AVAILABLE TO VISITING DOCTORS UPON REQUEST. A TOTAL OF 457 SPECIMENS WERE SO SUPPLIED. EIGHT INDIVIDUALS FROM OTHER INSTITUTIONS VISITED THE MUSEUM LABORATORY FOR ONE OR MORE DAYS TO LEARN MUSEUM TECHNICS.

7. SUPPLIES AND EQUIPMENT.

WORK IN THE MUSEUM LABORATORY HAS BEEN FACILITATED BY THE ACQUISITION OF A STRIP HEATER AND A SHAPER. NEW USES HAVE BEEN FOUND FOR THE PANTOGRAPH WHICH RESULT IN SIGNIFICANT SAVING OF TIME. THE PUBLIC MUSEUM HAS BEEN IMPROVED BY THE PURCHASE OF 40 NEW EXHIBIT CASES.

8. UNUSUAL PROBLEMS.

- A. THE CHIEF PROBLEM FACING THE MEDICAL MUSEUM IS PERMANENT QUARTERS FOR THE PUBLIC MUSEUM. THE BUILDING NOW OCCUPIED IS A TEMPORARY STRUCTURE AND IN THE PATH OF REDEVELOPMENT OF SOUTH WEST WASHINGTON. IT HAS BEEN OUR HOPE. THAT THE MUSEUM MIGHT REOCCUPY THE OLD RED BRICK BUILDING AT 7TH AND INDEFENDENCE AVENUE, S. W. WHEN THE ARMED FORCES MEDICAL LIBRARY IS GIVEN A NEW BUILDING. THERE IS NO ASSURANCE THAT THIS BUILDING WILL BE AVAILABLE AND IF IT IS MADE AVAILABLE, THAT IT WILL BE VACATED BEFORE DISMANTLING OF THE TEMPORARY BUILDING.
- B. MANY MUSEUM PROJECTS REMAIN UNCOMPLETED DUE TO LACK OF ADEQUATE PERSONNEL AS FOR EXAMPLE: INVENTORY OF MUSEUM ITEMS, ACCESSIONING OF ABOUT 5,000 ITEMS, PREPARATION OF MUSEUM CATALOGUES, REPLACEMENT OF SOILED MUSEUM LABELS, REMOUNTING OF GLASS JAR SPECIMENS IN PLASTIC, PREPARATION OF EXHIBITS WHICH ARE MORE INTELLIGIBLE TO THE PUBLIC, PREPARATION OF GROSS PATHOLOGY LOAN SETS, ETC.

captions to supplement Museum ex-hibits. Prepares drawings, pointings and **EXHIBIT ILLUSTRATION** BRANCH ADMINISTRATIVE DIVISION accessions current acquisitions of tiems to current occessioning sys-Museum Items; transfers old Museum loon and transfer of Museum Items; taining to stossiffication, location, Maintains all records and files per RECORDS, FILES & STORAGE BRANCH Directs overall activities of Medical Mussum torical schibits; historical advisor to all maintains Museum archives; prepares hiscallects and obstracts historical data; Prepares historical articles on Medical Museum and other departments of AFIP; divisions of the Medical Museum. HISTORICAL RESEARCH DIVISION FUNCTIONAL CHART CURATOR'S OFFICE MEDICAL MUSEUM specimens; reviews gross material in Audical Museum and other AFIP callections, salacts material for specially beard examination; previllan doctors in proporation for study by medical efficers and ci-Callects and dissects fresh gross PATHOLOGY BRANCH PROFESSIONAL DIVISION tive engramy; selects and predisplay and instruction. Revisws and classifies Medical pares anatomical material for Mussum's callsction of camparo-ANATOMY - EMBRYOLOGY BRANCH

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LABORATORY & TECHNIQUES

RESEARCH BRANCH

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prepares illustrated lectures and provides guide service for lay groups; prepares catalogues of selected

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MEDICAL MUSEUM

ACTING CURATOR ALFRED PLAUT, M.D.

ASSISTANT CURATOR
H. W. CODDINGTON, LT COL, MSC, USA

1. ORGANIZATION

THE MEDICAL MUSEUM OF THE ARMED FORCES INSTITUTE OF PATHOLOGY CONTINUES ITS MISSION OF MAINTAINING TWO MEDICAL MUSEUMS - BOTH DEDICATED TO THE COLLECTION, PRESERVATION, AND DISPLAY OF SELECTED MEDICAL MATERIAL OF MISTORICAL AND SCIENTIFIC VALUE, AND FURTHER, TO PROVIDE RESEARCH AND TEACHING FACILITIES FOR THE MEDICAL PROFESSION AND INFORMATION FOR ALL. THIS IS BEING ACCOMPLISHED IN TWO LOCATIONS; THE DOWNTOWN MEDICAL MUSEUM FOR PUBLIC DISPLAY IS PRESENTLY LOCATED IN A TEMPORARY BUILDING ON 9TH STREET AND INDEPENDENCE AVENUE, SOUTHWEST; THE OTHER, THE PROFESSIONAL CORNELL MUSEUM, IS IN THE AFIP BUILDING AT WRAMC. THE MEDICAL MUSEUM LABORATORY AND OFFICE OF THE CHIEF, HISTORICAL RESEARCH DIVISION, ARE ALSO LOCATED IN THE AFIP BUILDING.

2. PERSONNEL

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- A. COLONEL HUGH R. GILMORE, JR, MC, USA, CURATOR OF THE MEDICAL MUSEUM SINCE I JANUARY 1953; RETIRED ON 30 JUNE FROM ACTIVE DUTY IN THE ARMY. ON I JULY, CAPTAIN SAMUEL W. KIME, MC, USA, WAS APPOINTED ACTING CURATOR, IN ADDITION TO HIS PRIMARY DUTY AS CHIEF OF THE MUSEUM LABORATORY. HE WAS RELIEVED ON 4 OCTOBER AND DR. ALFRED PLAUT WAS APPOINTED ACTING CURATOR. AT THIS TIME THE POSITION OF ASSISTANT CURATOR WAS ESTABLISHED WITH THE APPOINTMENT OF LT COLONEL HARVEY W. CODDINGTON, MSC, USA. MAJOR JOSEPH Y. MICHALSKI, USAF (MSC), REPORTED FOR DUTY AND WAS ASSIGNED TO THE MUSEUM LABORATORY, AFIP BUILDING, ON 27 JULY.
- B. PERSONNEL ASSIGNED TO THE MEDICAL MUSEUM AS OF 31 DECEMBER:

 DIMILITARY 4; GRADED CIVILIANS 8; UNGRADED CIVILIANS 3; TOTAL 15.

 OF THIS NUMBER, 2 MILITARY, 4 GRADED CIVILIANS, AND 3 UNGRADED CIVILIANS

 ARE ASSIGNED TO THE DOWNTOWN MEDICAL MUSEUM.

3. ADMINISTRATIVE DIVISION

- A. A TOTAL OF 37 LOANS WERE HADE, CONSISTING OF 164 ITEMS, TO INDIVIDUALS AND/OR SCHOOLS, FOR EXHIBIT AND STUDY PURPOSES. THIS INCLUDED
 LOANS TO PERSONNEL OF JOHNS HOPKINS MEDICAL SCHOOL; UNIVERSITY OF MARYLAND;
 AMISTER INSTITUTE, PHILADELPHIA; HOWARD UNIVERSITY; PRINCE GEORGES COUNTY
 HEART ASSOCIATION; BALTIMORE RED CROSS; CATHOLIC UNIVERSITY; GEORGE WASHINGTON, UNIVERSITY; WRAMC; MISSIONARY COLLEGE, TAKOMA PARK; DR. PAUL SCHAFER
 TON, TV PROGRAM, WRAMC; ST DOMINIC'S SCHOOL, AND THE CAPITOL PAGE SCHOOL.
 - B. NEW ACCESSIONS TOTALED 96. THE LINCOLN MUSEUM CONTRIBUTED THE

BULLET THAT KILLED ABRAHAM LINCOLN; THE NEALTON PROBE USED TO REMOVE THE BULLET, AND A BOX CONTAINING SEVERAL SHALL BONE FRAGMENTS OF LINCOLN'S SKULE. ALSO ACCESSIONED WAS A BODY ARMOR VEST WORN IN COMBAT BY A MARINE WHOSE LIFE WAS SAVED BY THE VEST; THIS WAS CONTRIBUTED BY THE DIRECTOR, CAPTAIN W. M. SILLIPHANT, MC, USN, WHO OBTAINED THE VEST IN KOREA.

C. FIFTEEN GUEST EXHIBITS WERE DISPLAYED IN THE MUSEUM THROUGHOUT THE YEAR. FORTY-TWO EXHIBITS FROM THE JUNIOR SCIENCE FAIRS OF WASHINGTON, NEARBY MARYLAND AND VIRGINIA, WERE DISPLAYED DURING THE MONTH OF JUNE. FIVE OF THESE PRIZE-WINNING EXHIBITS WERE SELECTED FOR PERMANENT DISPLAY. MANY NEW EXHIBITS WERE DEVISED, DOCUMENTED, AND SET UP BY THE MUSEUM STAFF, INCLUDING A PERIOD X-RAY ROOM AND A COLLECTION OF STAMPS. A PROGRAM WAS INSTITUTED FOR A MORE LOGICAL PLACEMENT OF EXHIBITS AND FOR RELABELLING MUSEUM ITEMS WITH MORE DESCRIPTIVE AND INTELLIGIBLE INFORMATION.

4. PROFESSIONAL DIVISION (LABORATORY)

A. PATHOLOGY

- (1) Using the folio technique whereby multiple specimens of a single gross lesion can be mounted has lead to the development of a new teaching medium the gross pathology loan collection. A pilot set of selected lesions has been prepared in this fashion, and will be sent out to several teaching pathology departments for evaluation. Subsequently, it will be expanded and made available for loan on the same basis as the loan study sets of histopathology slides from the American Registry of Pathology.
- (2) THE CROCK SPECIMEN COLLECTION WAS ENLARGED AND IS BEING IMPROVED BY ATTACHING CONCISE PLASTIC LAMINATED CASE HISTORIES TO EACH SPECIMEN.
- (3) During the Year there has been considerable improvement in the quality of color retention of gross mounted specimens. This can be attributed, both to improved methods in the Laboratory, and increased use of Schein's solution by contributors of specimens.
- (4) A TOTAL OF 537 SPECIMENS WERE MOUNTED IN 1956, AS COMPARED WITH 516 IN 1955. A TOTAL OF 804 CROCK SPECIMENS WERE MADE AVAILABLE
 TO VISITING PHYSICIANS, MOST OF WHOM WERE PREPARING FOR SPECIALTY BOARD
 EXAMINATIONS. THE LABORATORY ALSO PREPARED SPECIALIZED MOUNTED SPECIMEN
 COLLECTIONS USED DURING THE FORENSIC PATHOLOGY AND VETERINARY PATHOLOGY
 COURSES AT AFIP

B. TECHNIQUE RESEARCH

(1) PREPARATION OF A LABORATORY MANUAL DESCRIBING TECHNIQUES USED IN THE MODERN MOUNTING AND DISPLAY OF GROSS PATHOLOGICAL SPECIMENS HAS BEEN IN PREPARATION SINCE JULY. THE MANUAL ALSO DISCUSSES IN DETAIL THE METHODS OF EMBEDDING AND WORKING WITH PLASTICS, COLOR RETENTION AND RESTORATION OF SPECIMENS, AND INCLUDES A COMPREHENSIVE REVIEW OF LITERATURE IN THIS FIELD. THE MANUAL WILL BE PUBLISHED EARLY IN 1957.

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- (2) MR. MARION A. WILCOX RECEIVED A MONETARY AWARD AND ARMY SUGGESTION AWARD CERTIFICATE FOR THE DEVELOPMENT AND FABRICATION OF AN IMPROVED CROCK SPECIMEN TRANSPORT TRAY.
- (3) A MULTIPLE STRIP, VARIABLE POSITION STRIP HEATER DESIGNED BY MR. JAMES B. SMITH, JR, HAS BEEN PLACED IN OPERATION. ITS USE HAS GREATLY FACILITATED AND INCREASED PRODUCTION OF MOUNTED SPECIMENS. MR. SMITH ALSO DEVELOPED A TALLOW-BASE BUFFING COMPOUND WHICH GREATLY SIMPLIFIED AND IMPROVES THE BUFFING OF FINISHED PLASTIC CASES.
- (4) NUMEROUS REQUESTS FOR INFORMATION ON EMBEDDING IN PLASTIC, WET AND DRY MOUNTING, A COLOR PRESERVATION AND RESTORATION OF SPECIMENS HAVE BEEN RECEIVED. TO MEET THIS DEMAND TECHNICAL DESCRIPTIONS HAVE BEEN COMPILED AND MIMEOGRAPHED AND FORWARDED TO THE REQUESTING INDIVIOUALS AND AGENCIES.

C. LABORATORY ACTIVITIES

- (1) MAJOR J. V. MICHALSKI WAS APPOINTED AND SERVED AS SPECIAL LECTURER IN ANATOMY, SCHOOL OF MEDICINE, GEORGE WASHINGTON UNIVERSITY.
- (2) CONTINUED EFFORT HAS BEEN EXERTED TO ACQUAINT OTHER AGENCIES WITH THE VALUE OF THE MODERN MOUNTED GROSS SPECIMENS AS AIDS AT VARIOUS LEVELS IN MEDICAL INSTRUCTION. THERE HAS BEEN, AND WILL CONTINUE TO BE, THE DEVELOPMENT OF A GREATLY INCREASED APPRECIATION OF THIS TOOL, TIVE EFFORT.

D. PROFESSIONAL MEETINGS

- (1) MR. JAMES B. SMITH JR, EXHIBITED AND SPOKE CONCERNING PLASTIC CASE MOUNTING OF GROSS SPECIMENS BEFORE THE ANNUAL SEMINAR OF THE D. C. CHAPTER, SOCIETY OF MEDICAL TECHNOLOGISTS ON 5 MAY.
- (2) MAJOR J. V. MICHALSKI PRESENTED A LECTURE ON "ANATOMY AND TRAUMATIC INJURY OF THE FACIAL NERVE" AT GEORGE WASHINGTON UNIVERSITY MEDICAL SCHOOL ON 19 DECEMBER.

E. TRAINING

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A TOTAL OF 19 PERSONS RECEIVED DETAILED ORIENTATION AND VARYING DURATIONS OF TRAINING IN MUSEUM LABORATORY TECHNIQUES. LENGTH OF
HETRAINING RANGED FROM 3 DAYS TO 3 NONTHS. IT IS ANTICIPATED, FROM INQUIRIES
RECEIVED, THAT IN 1957 THERE WILL BE SEVERAL PRESENTATIONS TO SHALL GROUPS
4.95.A FORMALIZED CURRICULUM OF THREE MONTHS DURATION.

F. MISCELLANEOUS

THE PRINCIPAL PROBLEM OF THE LABORATORY IS A SELF-IMPOSED ONE.

MAMELY, THE EDUCATIONAL TASK OF FAMILIARIZING A LARGER SPHERE OF SERVICE

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SIONAL TO BEGINNING MEDICAL CORPSMEN AND TECHNICIANS. TO THIS END THERE HAS BEEN PROPOSED CONTACT WITH TEACHING AND FIELD FACILITIES THROUGH ADMINISTRATIVE CHANNELS TO EFFECT A BETTER UNDERSTANDING OF THE HORPHOLOGICAL MANIFESTATIONS OF DISEASE AS SEEN IN THE MODERN GROSS SPECIMEN.

5. HISTORICAL RESEARCH

A. WORK WAS CONTINUED ON THE MUSEUM ARCHIVES. MR. ROBERT WALKER
DAVIS, RESEARCH ASSISTANT, COMPLETED THE FIRST CHAPTER OF THE HISTORY OF
THE MEDICAL MUSEUM, AND IS NOW DOING RESEARCH FOR THE SECOND CHAPTER. HE
ALSO WROTE MONOGRAPHS ON "INDIAN MEDICINE" AND "THE STORY OF PLASTIC SURGERY"
AND COMPLETED BIBLIOGRAPHY ON THE SURGERY OF THE AMERICAN REVOLUTIONARY WAR.
THE LONG TERM PROJECT, A BIBLIOGRAPHY OF MILITARY MEDICINE, IS STILL IN PROGRESS.

B. LECTURES AND MEETINGS

- (1) MR. MORRIS C. LEIKIND, HISTORIAN, GAVE, FOR THE FIRST TIME, A SERIES OF FOURTEEN LECTURES ON THE "HISTORY OF PATHOLOGY AND EXPERIMENTAL MEDICINE." THESE LECTURES WERE GIVEN AT THE AFIP FOR STAFF MEMBERS AND INTERESTED VISITORS. IN ADDITION, HE SERVED AS A MEMBER OF THE FACULTY AND GAVE HISTORICAL LECTURES FOR THE SHORT COURSES ON HISTOCHEMISTRY, FORENSIC PATHOLOGY AND THE SEMINAR ON DISEASES OF THE HEART.
- AMERICAN ASSOCIATION OF THE HISTORY OF MEDICINE, DURHAM, N.C., WHERE HE READ A PAPER ON "PIONEERS OF VIROLOGY". HE ALSO ADDRESSED THE WHITEHEAD STUDENT MEDICAL SOCIETY OF THE UNIVERSITY OF NORTH CAROLINA MEDICAL SCHOOL AT CHAPEL HILL, ON "THE HISTORY OF THE MICROSCOPE." IN SEPTEMBER MR. LEIKIND REPRESENTED AFIP AT THE PERKIN CENTENNIAL CELEBRATION AT THE WALDORF-ASTORIA HOTEL IN NEW YORK CITY. AS A PARTICIPANT HE SPOKE ON "ANILINE DYES THEIR IMPACT ON BIOLOGY AND MEDICINE." THIS LECTURE WAS REPEATED IN OCTOBER BEFORE THE MARYLAND BRANCH OF THE SOCIETY OF AMERICAN BACTERIOLOGISTS AT A MEETING HELD AT FORT MEADE. IN NOVEMBER MR. LEIKIND ADDRESSED THE SECOND ANNUAL MEETING OF THE D. C., MARYLAND AND VIRGINIA VETERINARY MEDICAL ASSOCIATION, THE ADDRESS WAS ENTITLED, "THE HISTORIAN LOOKS AT VETERINARY MEDICINE."

C. EDUCATION DIVISION

(1) EDUCATION AND INFORMATION

(A) THE MOTION PICTURE PROGRAM FOR THE 1955 - 56 SEASON WAS A SERIES OF FILMS FROM THE ATOMIC ENERGY COMMISSION ILLUSTRATING THE USE OF ATOMIC ENERGY IN THE FIELD OF MEDICINE. THE 1956 - 57 SERIES WAS A COMBINATION OF AEC FILMS AND MARCH OF MEDICINE KINESCOPES FROM THE SMITH, KLINE AND FRENCH LABORATORIES. THESE MOVES ARE SHOWN TWICE ON SUNDAY AFTERNOONS AND ARE WELL ATTENDED.

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THIS INCLUDED 1,069 SCHOOL GROUPS, TOTALLING 41,504.

- (c) DISTRIBUTION OF APPROXIMATELY 300,000 LEAFLETS WAS AN IMPORTANT PHASE IN THE EDUCATION WORK. STUDENTS APPRECIATE THE LEAFLETS VERY MUCH SINCE TEACHERS GIVE THEM CREDIT FOR HAVING THE LEAFLETS IN SCHOOL NOTEBOOKS. MANY REQUESTS ARE RECEIVED BY MAIL FROM STUDENTS WHO HAVE SEEN OR NEARD ABOUT THE LEAFLETS. SEVEN NEW LEAFLETS WERE PREPARED IN 1956.
- (D) CONDUCTED ORIENTATION TOURS WERE GIVEN TO MEDICAL SERVICE PERSONNEL FROM THE ARMY, NAVY AND AIR FORCE; TO MEDICALLY MINDED CIVIC GROUPS; TO SCHOOL GROUPS AND SCIENCE CLUBS.
- (E) ASSISTANCE WAS GIVEN TO WRITERS AND HISTORIANS IN THEIR SEARCH FOR MEDICO-HISTORICAL INFORMATION. MRS. DOROTHEA JONES, AUTHOR OF "WASHINGTON IS WONDERFUL" SPENT SEVERAL HOURS IN THE MUSEUM OBTAINING INFORMATION WHICH SHE USED IN THE BOOK.

6. GENERAL ACTIVITIES

- A. AN AD HOC COMMITTEE WAS APPOINTED FOR THE PURPOSE OF STUDY-ING AND MAKING RECOMMENDATIONS AS TO PROCEDURES FOR THE ACCESSIONING OF MEDI-CAL MUSEUM ITEMS. FINDINGS OF THE COMMITTEE HAVE BEEN SUBMITTED.
- B. A WORKSHOP WAS SET UP IN THE PUBLIC MUSEUM TO GIVE ACTIVE QUIDANCE TO VARIOUS EXHIBITORS OF THE NATIONAL LIBRARY OF MEDICINE IN THE PREPARATION, DEVELOPMENT AND PRESENTATION OF THEIR BI-MONTHLY EXHIBITS.

 A JOINT LIBRARY-MUSEUM EXHIBIT ON THE SIGMUND FREUD CENTENARY WAS RECEIVED WITH ACCUAIM. THIS EXHIBIT WAS LOANED TO THE UNIVERSITY OF MICHIGAN FOR A LIMITED TIME.
- C. WITH THE COOPERATION OF DR. LENT C. JOHNSON, ALL ORTHOPEDIC MATERIAL IN THE DOWNTOWN MUSEUM IS BEING REVIEWED, PHOTOGRAPHED, X-RAYED AND REMOUNTED IN PLASTIC. IT IS HOPED THAT THIS TYPE OF PROGRAM WILL BE EXTENDED TO COVER OTHER SPECIALTY GROUPS.

7. UNUSUAL PROBLEMS

THE CHIEF AND MOST IMMINENT PROBLEM OF THE MEDICAL MUSEUM WILL BE TMAT OF OBTAINING ADEQUATE AND PERMANENT ACCOMPONIONS FOR THE DOWNTOWN PUBLIC MUSEUM. IT IS PRESENTLY LOCATED IN A TEMPORARY BUILDING THAT IS SCHEDULED TO BE VACATED AND DEMOLISHED AS AUTHORIZED BY THE SOUTHWEST WASHINGTON REDEVELOPMENT PROGRAM IN EARLY 1958. PENDING PERMANENT QUARTERS, IT IS IMPERATIVE THAT SUITABLE TEMPORARY FACILITIES BE MADE AVAILABLE SO THAT MUSEUM AND SERVICES OFFERED BY THE PUBLIC MUSEUM WILL BE CONTINUED WITHOUT INTERRUPTION.

MEDICAL MUSEUM

CURATOR H. W. CODDINGTON, COLONEL, MSC, USA

1. PERSONNEL.

- A. THE MEDICAL MUSEUM WAS UNDER THE DIRECTION OF SEVERAL ACTING CURATORS: DR. ALFRED PLAUT SERVED IN THIS CAPACITY FROM 4 OCTOBER 1956 TO 6 MARCH 1957. ON 6 MARCH 1957 COLONEL CODDINGTON WAS APPOINTED ACTING CURATOR AND ON 2 AUGUST 1957 HE WAS NAMED CURATOR. HE HAS THE DISTINCTION OF BEING THE FIRST MEDICAL SERVICE CORPS OFFICER TO HOLD THIS POST.
- B. CAPTAIN SAMUEL W. KIME, JR., CHIEF OF THE PROFESSIONAL DIVISION LEFT THE SERVICE ON 5 JANUARY 1957 AND WAS SUCCEEDED BY MAJOR JOSEPH V. MICHALSKI, USAF (MSC).
- C. QUANTITATIVE REQUIREMENTS FOR PERSONNEL FOR THE MUSEUM REMAINED UNSATISFIED. THE MONUMENTAL TASK OF COMPLETING THE INVENTORY OF ALL ACCESSIONED ITEMS PROCEEDED VERY SLOWLY BECAUSE OF THIS INADEQUACY. THE EVENTUAL RELOCATION OF THE MUSEUM MAKES IT IMPERATIVE THAT THIS DEFICIENCY BE REMEDIED IN THE VERY NEAR FUTURE.

2. DEVELOPMENTS.

- A. THE BOARD OF GOVERNORS IN REGULAR MEETINGS IN 1957 STATED THAT THE MUSEUM SHOULD REMAIN IN WASHINGTON, AND SHOULD BE LOCATED SO AS TO BE READILY ACCESSIBLE TO VISITORS. THIS WAS ALSO THE RECOMMENDATION OF THE SCIENTIFIC ADVISORY BOARD MEETING ON 2 MARCH 1957. A LULL IN THE ACTIVITIES OF THE SOUTHWEST REDEVELOPMENT PLAN LESSENED THE URGENCY FOR IMMEDIATE RELOCATION.
- B. THE MEDICAL MUSEUM OF THE ARMED FORCES INSTITUTE OF PATHOLOGY CONTINUED ITS MISSION OF MAINTAINING TWO UNIQUE COLLECTIONS, BOTH DEDICATED TO THE ACCESSIONING, PRESERVATION, AND DISPLAY OF SELECTED MEDICAL MATERIAL OF HISTORICAL AND SCIENTIFIC WORTH. FURTHER, IT PROVIDED RESEARCH AND TEACHING FACILITIES FOR THE MEDICAL PROFESSION AND ALLIED SCIENCES AND INFORMATION FOR ALL. EXTENSIVE FLOOR PLAN CHANGES AND THE INITIATION AND IMPLEMENTATION OF A REVITALIZATION POLICY PRESENT TO THE PUBLIC A PICTURE OF THE STRIDES THAT MILITARY MEDICINE HAS MADE IN MODERN RESEARCH AND DEVELOPMENT. EXHIBITS SUCH AS "SPACE BIOLOGY", "PSYCHIATRY IN OPERATION DEEPFREEZE" AND "MEDICAL ASPECTS OF AIRCRAFT ACCIDENT INVESTIGATION", FORMED THE VANGUARD OF MANY NEW AND EX-
- C. THE HISTORICAL ASPECTS OF MILITARY MEDICINE WERE NOT NEGLECTED. THE COLLECTION OF 3700 BONES DATING BACK TO THE CIVIL WAR WAS COMPLETELY INVENTORIED, AND 2900 OF THESE WERE X-RAYED AND PHOTOGRAPHED. THE MOST COMPLETE COLLECTION OF MICROSCOPES IN THE WORLD WAS INVENTORIED, PHOTOGRAPHED,
 AND IS BEING EXHIBITED. THE EXHIBIT, "EVOLUTION OF THE MICROSCOPE". WAS COMPLETED. THE MICROSCOPE COLLECTION CATALOGUE WAS INDEXED. THE ACCOMPLISHMENTS
 OF MANY FAMOUS WOMEN PHYSICIANS WAS PORTRAYED AS THE EXHIBIT "WOMEN IN MEDICINE". THE MUSEUM ALSO CONDUCTED HISTORICAL RESEARCH INTO LOCATION OF HOSPITALS IN WASHINGTON DURING THE CIVIL WAR, AND HEAD WOUNDS OF FAMOUS MEN.

- D. A TOTAL OF FIFTEEN GUEST EXHIBITS WERE TEMPORARILY DISPLAYED IN THE MUSEUM; FIVE PERMANENT EXHIBITS WERE SHOWN AT NATIONAL AND LOCAL MEETINGS.
- CREASE OF 31,704 OVER 1956. AT LEAST 45 FOREIGN COUNTRIES WERE REPRESENTED BY VISITORS IN 1957.
- F. THE CORNELL PROFESSIONAL MUSEUM AND SLOAME MUSEUM LABORATORY, LOCATED IN THE ARMED FORCES INSTITUTE OF PATHOLOGY BUILDING IS THE DISPLAY. CENTER FOR PROFESSIONAL EXHIBITS. THE SCOPE AND ACTIVITIES OF THE LABORATORY WERE EXPANDED TO EXPLOIT FURTHER THE INTRINSIC VALUE OF GROSS SPECIMENS FOR TEACHING PURPOSES. SETS OF SELECTED GROSS LESIONS MOUNTED IN LIGHTWEIGHT PLASTIC "FOLIO" FORM, AND A SET OF PLASTIC EMBEDDED NORMAL BRAIN SLICES ARE AVAILABLE FOR LOAN. EVALUATION PROGRESSED IN ANOTHER UNIQUE DEVICE, THE HISTOPATHOLOGY TISSUE COMPARATOR, FOR USE IN FAMILIARIZING TISSUE TECHNICIAN TRAINEES WITH THE GROSS CHARACTERTISTICS OF THEIR WORKING MATERIALS.
- G. THE DEVELOPMENT AND APPLICATION OF SEVERAL NEW TECHNIQUES RESULTED IN THE PRODUCTION OF 484 GROSS MOUNTED SPECIMENS DURING THE YEAR. A MONETARY AWARD AND AN ARMY SUGGESTION AWARD CERTIFICATE WERE RECEIVED FOR DEVELOPING A GELANTINIZING PROCESS THAT ENHANCES THE REALISM AND INCREASES THE DURABILITY OF GROSS SPECIMENS. SIMILAR RECOGNITION WAS GIVEN FOR DESIGNING AND PRODUCING A MULTIPLE STRIP VARIABLE POSITION HEATER WHICH PUTS THE PRODUCTION OF PLASTIC SPECIMEN CASES ON A MASS PRODUCTION BASIS.
- H. CONTINUED RESEARCH ON THE PROBLEM OF TISSUE PRESERVATION RESULTED IN THE USE OF SOLUTIONS PRODUCING REMARKABLY GOOD COLOR PRESERVATION. THE MANUAL OF MACROPATHOLOGICAL TECHNIQUES, WHICH GIVES A COMPLETE RESUME OF GROSS. TISSUE PRESERVATION, COLOR RETENTION, RESTORATION, PLASTIC EMBEDMENT, WET AND DRY MOUNTING, WAS COMPLETED. REQUESTS FOR ALMOST 150 OF THESE MANUALS WERE RECEIVED AND FILLED.
- I. The WET SPECIMEN GROCK COLLECTION WAS ENLARGED, REVIEWED, AND COMPLETELY CATALOGUED. THE USE OF SPECIMENS BY PHYSICIANS PREPARING FOR SPECIAL-TY BOARDS WAS TRIPLED OVER THE PREVIOUS YEAR; 2564 SPECIMENS WERE WITHDRAWN IN 1957 AS COMPARED WITH 804 IN 1956. THE LABORATORY PROVIDED THE BULK OF THE SPECIMENS USED IN THE ANNUAL GROSS PATHOLOGY EXAMINATION OF THE AMERICAN BOARD OF PATHOLOGY IN APRIL 1957.
- J. THE LABORATORY CONTINUED WORK ON THE PREPARATION OF A COLLECTION OF ANATOMICAL SPECIMENS MOUNTED IN PLASTIC FOR INSTRUCTIONAL USE.

3. TRAINING.

AN INFORMAL COURSE OF ON-THE-JOB TRAINING IN MUSEUM TECHNIQUES, WHICH HAD BEEN GIVEN FOR SEVERAL YEARS, WAS FORMALIZED DURING 1957. THIS PROGRAM WAS ANNOUNCED BY THE COLLEGE OF AMERICAN PATHOLOGY AS A PART OF A COMBINED COURSE FOR MORGUE AND MUSEUM ATTENDANTS AND DEVELOPED AS A RECOGNITION OF THE NEED FOR MORE AND BETTER TRAINED TECHNICIANS OF THIS TYPE.

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- MEDICAL MUSEUM

CURATOR

A. E. MINNS, JR., COLONEL, MSC, USA

1. ORGANIZATION.

- A. THE MEDICAL MUSEUM OF THE ARMED FORCES INSTITUTE OF PATHOLOGY CONTINUED TO MAINTAIN TWO MEDICAL MUSEUMS, A PROFESSIONAL (CORNELL) MUSEUM IN THE AFIP BUILDING, AND A PUBLIC MUSEUM IN CHASE HALL ON INDEPENDENCE AVENUE AT 9TH STREET, SOUTHWEST, IN THE DOWNTOWN AREA.
- B. TO MAKE AVAILABLE MUCH NEEDED ROOM FOR THE PROFESSIONAL AC-TIVITIES OF THE INSTITUTE, IN JULY AND AUGUST THE MUSEUM LABORATORY WAS MOVED FROM THE MAIN BUILDING OF THE INSTITUTE AND RELOCATED IN CHASE HALL.

2. PERSONNEL.

- A. THE MEDICAL MUSEUM BEGAN THE YEAR 1958 UNDER THE DIRECTION OF COLONEL HARVEY W. CODDINGTON, MSC. HAVING BEEN TRANSFERRED ON 3 FEBRUARY 1958 TO THE OFFICE OF THE SURGEON GENERAL, HE WAS REPLACED AS CURATOR BY COLONEL ALBERT E. MINNS, JR., ALSO OF THE MEDICAL SERVICE CORPS.
- B. MAJOR JOSEPH V. MICHALSKI, USAF (MSC), CONTINUED AS CHIEF OF THE PROFESSIONAL DIVISION UNTIL 17 AUGUST 1958, WHEN AT HIS OWN REQUEST HE WAS RELEASED FROM ACTIVE DUTY. THIS POSITION REMAINED VACANT THROUGHOUT THE BALANCE OF THE YEAR.
- C. QUANTITATIVE REQUIREMENTS FOR PERSONNEL, INADEQUATE AT BEST, WERE FURTHER REDUCED BY THE LOSS OF ONE ENLISTED MAN. THE ENLISTED MAN, A LABORATORY TECHNICIAN, HAD BEEN SERVING IN AN AREA WHERE THE SHORTAGE WAS FELT MOST SEVERELY, THE INVENTORYING AND ACCESSIONING OF THE GREAT NUMBER OF MUSEUM ITEMS ON HAND.

3. DEVELOPMENTS.

- A. RELOCATION OF THE PUBLIC MUSEUM FROM ITS PRESENT LOCATION IN A TEMPORARY BUILDING MUST BE CONSIDERED IN ALL ACTIVITIES OF THE MUSEUM. THE MUSEUM IS OPERATING WITH CONFIDENCE IN THE POSITION TAKEN BY THE BOARD OF GOVERNORS THAT THE MUSEUM WILL ALWAYS BE LOCATED IN THE DOWNTOWN AREA OF WASHINGTON AND READILY ACCESSIBLE TO THE VISITOR.
- B. THE CORNELL PROFESSIONAL MUSEUM CONTINUES TO EMPHASIZE A DISPLAY OF MOUNTED GROSS PATHOLOGICAL MATERIAL OF PARTICULAR INTEREST TO PATHOLOGISTS AND SURGEONS, AS WELL AS TO CLINICIANS AND RESEARCHERS. SEVERAL VARIATIONS
 OF EACH TYPE LESION ARE SHOWN IN SPECIMENS PRESERVED TO RETAIN THE TRUE COLOR
 SEEN IN SURGERY OR AT AUTOPSY.

- C. THE DYNAMIC APPROACH IN THE PRESENTATION OF MODERN MEDICAL RESEARCH AND DEVELOPMENT ADVANCES IN THE ARMED SERVICES BEGUN LAST YEAR HAS BEEN CONTINUED AND EXPANDED. CONTINUING ROTATION AND CHANGE OF EXHIBITS HAVE GIVEN THE PUBLIC MUSEUM A "LIVING ATMOSPHERE" WHICH HAS BROUGHT MANY VISITORS BACK THE SECOND AND THIRD TIME. OF THE 370 EXHIBITS PRESENTED VISITORS TO THE PROFESSIONAL AND PUBLIC MUSEUMS DURING THE YEAR, 112 REPRESENTED NEW OR REFURBISHED DISPLAYS.
- D. Models of Research Equipment and Exhibits Pertaining to Aero Medical Research, Aviation Pathology, and Space Medicine have been maintained in a current status in the public display area of the Museum. In addition, an exhibit describing the specialized psychiatric studies of the Navy in Arctic operations has been maintained on display throughout the year.
- E. INCLUDED IN DONATIONS TO THE MUSEUM WAS A KIT OF SURGICAL INSTRUMENTS RECEIVED FROM MISS MILDRED ELOISE SMITH OF CHICAGO. THESE INSTRUMENTS HAD
 BEEN USED BY HER GREAT GRANDFATHER, DR. ARCHIMIDES SMITH, SURGEON ON THE LAWRENCE
 AND THE NIAGARA IN THE BATTLE OF LAKE ERIE: THE INSTRUMENTS ORIGINALLY HAD BEEN
 PRESENTED TO DR. SMITH BY GENERAL WILLIAM H. HARRISON PRIOR TO HIS BEING PRESIDENT.
- F. THE DIRECTORATE OF THE AFIP, THE CURATOR AND STAFF OF THE MEDICAL MUSEUM IN JANUARY WERE HOSTS TO THE EXECUTIVE COUNCIL OF THE NATIONAL SOCIETY OF THE DAUGHTERS OF THE AMERICAN REVOLUTION AT A SPECIAL SHOWING OF THE EXHIBIT "WOMEN IN MEDICINE." MAJOR GENERAL JAMES P. COONEY, MC, DEPUTY SURGEON GENERAL OF THE ARMY, WAS GUEST SPEAKER.
- G. COLONEL MINNS, THE CURATOR, ATTENDED THE ANNUAL MEETING OF THE AMERICAN MUSEUM ASSOCIATION, CHARLESTON, SOUTH CAROLINA, IN APRIL.
- H. THE MOTION PICTURE PROGRAM, WHICH IS PRESENTED TO THE PUBLIC ON SUNDAY AFTERNOONS, OCTOBER THROUGH MAY, WAS SUCCESSFULLY CONTINUED. AS A PART OF THIS PROGRAM, THE COLOR FILM "GATEWAYS TO THE MIND" WAS BORROWED FROM ITS COMMERCIAL SPONSORS IMMEDIATELY AFTER ITS INITIAL TELEVISION PRESENTATION AND WAS SHOWN ON THE FIVE SUNDAYS IN NOVEMBER, THE FIRST LOCAL SHOWING OF THIS FILM IN THE GREATER WASHINGTON AREA.
- I. Two members of the staff of the Museum, Mr. James B. Smith, Jr., and SP-4 Richard F. Goll, USAR, received suggestion awards. The award to Mr. Smith was given for formulating a Buffing compound which increased the speed of production of plastic items and eliminated the dirt and dust of previous methods. SP-4 Goll was given the award for designing and fabricating a Jig to provide greater control while grinding folio type plastic boxes while insuring relative safety to the working technician.
- J. Numerous requests for Loans of Gross material were satisfied during the Year. A total of 1,110 crock specimens were withdrawn for use by candidates for medical specialty board examinations through the first six months of 1958.
 About 1 July, the Museum was relieved of the operational responsibility for the wet tissue crock collection due to the relocation of the Laboratory.
- K. HISTOPATHOLOGY TISSUE COMPARATORS WERE CONSTRUCTED AND DISTRIBUTED TO A SELECTED NUMBER OF ARMED FORCES DASES AND INSTALLATIONS FOR EVALUATION.

L. THE MUSEUM CONTINUED TO DISTRIBUTE ON REQUEST COPIES OF THE MANUAL OF MACROPATHOLOGICAL TECHNIQUES TO BOTH MILITARY AND CIVILIAN INDI-VIDUALS AND INSTITUTIONS. THIS MANUAL, WHICH GIVES A COMPLETE RESUME OF GROSS TISSUE PRESERVATION, COLOR RETENTION, PLASTIC EMBEDDING, AND WET AND DRY MOUNTING, IS GAINING REPUTATION AS AN AUTHORITATIVE DOCUMENT IN ITS FIELD.

4. INTRA AND INTERSERVICE.

- A. A TRAVELING EXHIBIT ON WOMEN IN MEDICINE WAS SHOWN AT THE WASHINGTON HOSPITAL CENTER, THE NATIONAL HEADQUARTERS OF THE DAUGHTERS OF THE AMERICAN REVOLUTION, AND AT THE ANNUAL MEETING OF THE AMERICAN PUBLIC HEALTH ASSOCIATION. TRAVELING EXHIBITS ON THE EVOLUTION OF THE STETHOSCOPE AND BLOOD LETTING WERE ALSO PREPARED AND SHOWN. EXHIBITS WERE SUPPLIED TO VARIOUS HOSPITALS AND HEALTH AGENCIES FOR DISPLAY DURING NATIONAL HOSPITAL WEEK, THE ANNUAL MEETING OF THE AMERICAN UROLOGICAL ASSOCIATION, FOR THE U. S. FRIGATE CONSTELLATION, AND TO THE GREATER WASHINGTON EDUCATIONAL TELEVISION ASSOCIATION, INC.
- B. AN EXHIBIT OF INSIGNIA USED BY THE MEDICAL DEPARTMENT IN WORLD WAR II WAS PREPARED FOR PHOTOGRAPHY AND INCLUSION AS THE FRONTISPIECE FOR ONE OF THE HISTORICAL VOLUMES PERTAINING TO THE ARMY MEDICAL SERVICE SOON TO BE PUBLISHED.
- C. A NUMBER OF MUSEUM LITEMS WERE LOANED TO THE SMITHSONIAN INSTI-
- D. THE LABORATORY CONTINUED TO OFFER A CENTRALIZED MACROPATHOLOGICAL SERVICE TO QUALIFIED REQUESTORS THROUGHOUT THE MILITARY SERVICE AND GOVERNMENTAL AGENCIES. SPECIFIC EXAMPLES ARE FORT DIETRICH, MARYLANU (EXPERIMENTAL PATHOLOGY SPECIMENS), TRAVIS AIR FORCE BASE (SPECIMENS EMPHASIZING CLINICAL MEDICINE), AND GUNTER AIR FORCE BASE (VETERINARY TECHNICIAN TRAINING.)
- E. PLASTIC HOLDERS FOR CYTOLOGICAL SMEAR SLIDE FIXATION WERE
 DESIGNED AND FABRICATED FOR USE BY WALTER REED ARMY HOSPITAL. A MANUSCRIPT
 DESCRIBING THIS DEVICE WAS PREPARED AND SUBMITTED.
- F. SEVERAL HISTORICAL TEMS WERE MOUNTED FOR THE NATIONAL CAPITAL PARK SERVICE. IN ADDITION, A SET OF CIVIL WAR INSTRUMENTS WAS TRANSFERRED TO THEM FOR INCORPORATION IN A PERMANENT BATTLEFIELD EXHIBIT IN RICHMOND, VIRGINIA.
- G. A NUMBER OF MUSEUM ITEMS WERE PLACED ON LONG-TIME LOAN TO THE FORT RILLEY-MUSEUM, FORT RILLEY, KANSA'S.
- H. CONTINUING SUPPORT WAS PROVIDED THE WRAMC TELEVISION DIVISION IN SUPPLYING MEDICAL, PATHOLOGICAL, AND MEDICOHISTORICAL MATERIAL FOR THEIR VARIOUS TV PROJECTS.
- I. MOUNTED GROSS PATHOLOGICAL SPECIMENS WERE LOANED TO THE CHIEF OF THE BUREAU OF MEDICINE AND SURGERY, DEPARTMENT OF THE NAVY, FREEDMAN'S HOSPITAL, MARYLAND LIFE INSURANCE UNDERWRITERS ASSOCIATES, AND TO THE AMERICAN TEMPERANCE SOCIETY.

5. TRAINING.

THE MUSEUM LABORATORY CONTINUED TO OFFER THREE ORGANIZED COURSES OF INSTRUCTION IN THE SCIENCE AND TECHNIQUE OF MACROPATHOLOGY. ONE COURSE OF THREE WEEKS DURATION, PRESENTING THE BASIC PRINCIPLES OF TISSUE PRESERVATION, PLASTIC FABRICATION, AND SPECIMEN MOUNTING WAS SUCCESSFULLY COMPLETED BY TWO STUDENTS.

THE SAME COURSE IN AN EXPANDED FORM WAS OFFERED AS A SIX-MONTH COURSE FOR MORGUE ATTENDANTS AND MUSEUM AIDES. NO STUDENTS APPLIED FOR THIS COURSE DURING 1958.

A 16-HOUR BLOCK OF INSTRUCTION IN MUSEUM LABORATORY METHODOLOGY WAS GIVEN AS A SUPPLEMENT TO THE HISTOPATHOLOGY TECHNICIAN'S COURSE AND 24 STUDENTS WERE GRADUATED. IN ADDITION, 15 OTHER PERSONS WERE GIVEN SPECIAL PHASE TRAINING OF VARYING DEGREES IN LABORATORY TECHNIQUES AS REQUESTED BY THEIR SPONSORING AGENCIES.

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FUNCTIONAL CHART

MEDICAL MUSEUM

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CURATOR'S OFFICE

DIRECTS OVERALL ACTIVITIES OF MEDICAL MUSEUM

PROFESSIONAL DIVISION

TION, PLASTIC-BOX FABRICATION, AND PLASTIC EMBED-GROSS PATHOLOGY LOAN SETS; PREPARES HISTOPATH-METHODS: FABRICATES PLASTIC BOXES FOR SPECIMEN-MATERIAL FOR DISPLAY AND INSTRUCTION; PREPARES COLLECTS, PRESERVES AND MOUNTS SELECTED GROSS GROSS PATHOLOGICAL SPECIMENS OF PARTICULAR IN-TIVE ANATOMY; SELECTS AND PREPARES ANATOMICAL TION FOR SPECIALTY BOARD EXAMINATIONS; REVIEWS OLOGY TISSUE COMPARATORS; PREPARES PATHOLOGI-CAL AND ANATOMICAL EXHIBITS FOR NATIONAL MEET MATERIAL IN MEDICAL MUSEUM AND OTHER AFIP COL-MOUNTING; CONDUCTS TRAINING IN TISSUE PRESERVA PATHOLOGICAL SPECIMENS; SELECTS AND DISPLAYS LECTIONS; SELECTS MATERIAL FOR STUDY BY MEDI-AND CLASSIFIES MUSEUM COLLECTION OF COMPARA-TEREST TO PROFESSIONAL GROUPS; REVIEWS GROSS CAL OFFICERS AND CIVILIAN DOCTORS IN PREPARA-INGS; CONDUCTS RESEARCH TO IMPROVE MOUNTING

PUBLIC DIVISION

INDIVIDUALS; CLEANS EXHIBITS, EXHIBIT CASES, DISPLAY AND CLASSIFIES MUSEUM ITEMS, MAINTAINS ALL RECORDS LOAN AND/OR TRANSFER OF MUSEUM ITEMS; ERECTS AND DISMANTLES EXHIBITS; PREPARES ORAWINGS AND PAINT-EXHIBITS; PREPARES AND PRESENTS ILLUSTRATED LEC-ALL ACCESSIONED ITEMS AND PREPARES SPECIAL CATA INFORMATIONAL LEAFLETS ON MUSEUM ACTIVITIES AND COLLECTS, PRESERVES AND DISPLAYS SELECTED MEDI-AND FILES PERTAINING TO CLASSIFICATION, LOCATION, CAL MATERIAL OF HISTORICAL AND/OR SCIENTIFIC VA NGS TO SUPPLEMENT MUSEUM EXHIBITS; CATALOGUES OGUES OF SELECTED COLLECTIONS; ADVISES ON HIS-RELATIVE TO THE MEDICAL MUSEUM; ABSTRACTS AND LUE: ACCESSIONS CURRENT ACQUISITIONS OF MUSEUM TORICAL MATTERS; PREPARES HISTORICAL ARTICLES COLLECTS HISTORICAL DATA; MAINTAINS MUSEUM AR-CHIVES; PREPARES HISTORICAL EXHIBITS; PREPARES TURES, PROVIDES GUIDE SERVICE TO LAY GROUPS OR TEMS TO CURRENT ACCESSIONING SYSTEM; REVIEWS

MEDICAL MUSEUM

CURATOR

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A. E. MINNS, JR., COLONEL, MSC, USA

I. ORGANIZATION:

- A. THE MEDICAL MUSEUM OF THE ARMED FORCES INSTITUTE OF PATHOLOGY IS MAINTAINED IN CHASE HALL ON INDEPENDENCE AVENUE AT 9TH STREET, SOUTHWEST, IN THE DOWNTOWN AREA. IT IS DEDICATED TO THE COLLECTION, PRESERVATION, AND DISPLAY OF SELECTED MEDICAL MATERIAL OF MILITARY, HISTORICAL, AND SCIENTIFIC VALUE TO PROVIDE INSTRUCTION FOR THE MEN AND WOMEN OF THE ARMED FORCES, RESEARCH AND TEACHING FACILITIES FOR THE MEDICAL PROFESSION, AND INFORMATION FOR ALL.
- B. THE PROFESSIONAL (CORNELL) MUSEUM, WHICH WAS INSTALLED IN THE AFTP BUILDING IN 1955, WAS MOVED TO CHASE HALL IN APRIL AND INSTALLED INTACT IN A ROOM ON THE FIRST FLOOR. HERE, IT IS MAINTAINED AS A PROFESSIONAL MUSEUM, NOT AVAILABLE TO THE GENERAL PUBLIC. THIS MOVE WAS MADE TO MAKE AVAILABLE ADDITIONAL SPACE FOR THE PROFESSIONAL ACTIVITIES OF THE INSTITUTE. HOWEVER, ITS RELOCATION IN CHASE HALL BRINGS UNDER ONE ROOF ALL MUSEUM FUNCTIONS AND PROVIDES A COMPLETE PICTURE OF ITS SCORE TO THE MANY PROFESSIONAL VISITORS.

2. PERSONNEL.

- A. THE MEDICAL MUSEUM CONTINUED THROUGHOUT THE YEAR UNDER THE DIRECTION OF COLONEL AUBERT E. MINNS. JR. MSC.
- B. THE QUANTITATIVE REQUIREMENTS FOR PERSONNEL, INADEQUATE AT BEST, REMAINED BELOW THE EXPECTED LEVEL. THE POSITION OF CHIEF OF THE PROFESSIONAL DIVISION REMAINED VACANT THROUGHOUT THE YEAR BECAUSE OF UNAVAILABILITY OF A SUITABLE PERSON.
- C. MR. ROBERT WALKER DAVIS, RESEARCH HISTORIAN, TERMINATED HIS SERVICES WITH THE MEDICAL MUSEUM IN APRIL TO TAKE A POSITION WITH THE NATIONAL WAR COLLEGE.
 THIS POSITION REMAINED VACANT UNTIL 30 NOVEMBER, WHEN MR. SAMUEL KIER REPORTED FOR DUTY.
- D. Mr. John Walter Findlay, Clerk-typist in the Administrative Branch, resigned in October, with no replacement at year's end.

THE LOSS OF THESE TWO (2) PEOPLE, REPRESENTING NINE (9) MAN MONTHS, PLUS THE FACT THAT NO TEMPORARY SUMMER HELP WAS AVAILABLE, SLOWED DOWN ACTIVITIES, PARTICULARLY IN THE INVENTORYING AND ACCESSIONING OF MUSEUM ITEMS.

E. Personnel assigned to the Museum as of 31 December 1959 were:

MILITARY 4

CIVILIAN 10

3. DEVELOPMENTS.

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- A. ALTHOUGH RELOCATION OF THE PUBLIC MUSEUM FROM ITS PRESENT LOCATION IN A TEMPORARY BUILDING MUST BE CONSIDERED IN ALL ACTIVITIES OF THE MUSEUM, ANOTHER YEAR HAS ELAPSED WITHOUT THE ANTICIPATED MOVE BECOMING A REALITY. THIS WAS DUE TO THE FACT THAT CONGRESS DURING THE 1959 SESSIONS DID NOT APPROPRIATE THE NECESSARY FUNDS REQUIRED FOR THE GOVERNMENT OFFICE BUILDING PLANNED FOR THE SITE ON WHICH THE MUSEUM NOW STANDS. WHEN THE MUSEUM WILL BE FORCED TO VACATE IS A MATTER OF CONJECTURE. THE MUSEUM GOES ABOUT "BUSINESS—AS—USUAL" WITH COMPLETE FAITH IN THE POSITION TAKEN BY THE BOARD OF AND READILY ACCESSIBLE TO THE VISITOR. A REQUEST HAS BEEN MADE WITH THE OFFICE OF SPACE MANAGEMENT FOR THE BUILDING NOW OCCUPIED BY THE NATIONAL LIBRARY OF MEDICINE. AS THIS BUILDING WAS ORIGINALLY BUILT (1887) FOR THE MUSEUM AND LIBRARY, IT WOULD BE LOCALLY SUITABLE AND WOULD ADEQUATELY HOUSE THE MUSEUM FOR THE NEXT TWENTY—FIVE (25)
- B. THE CORNELL PROFESSIONAL MUSEUM IN ITS NEW LOCATION WITHIN THE PUBLIC MUSEUM, CONTINUES TO DISPLAY SELECTED PATHOLOGICAL SPECIMENS OF PARTICULAR INTEREST TO PATHOLOGISTS AND CLINICIANS.
- C. THE MEDICAL MUSEUM, LOCATED ON ANDERENDENCE AVENUE AT 9TH STREET, SOUTHWEST, HAS BEEN CALLED THE SHOW WINDOW OF MILLITARY MEDICINE WHERE THE ACCOMPLISHMENTS OF THE ARMED FORCES OF THE SHEED OF MEDICAL SCHENCE ARE PORTRAYED FOR THE ENLEIGHTEN-MENT OF THE RUBLIC. THE PRESENTATION OF EXHIBITS SHOWING STHE ADVANCES MADE MAY STHE ARMED SERVICES AN AMODERN MEDICAL PRESEARCH VAND DEMELOPMENT CONTLINUED THROUGHOUT WITH THE ARMED PRINTING OF MEDICAL PRESEARCH VAND THE REFURBISHING OF MOLD OR MUTHODED CONES HAS BEEN AN AMODERN VISITORS TO FREQUENTLY RETURN. DURING 1959, THREE MUNDRED FRIGHTY—FOUR WERE THE PRESENTED IN THE MEDICAL MUSEUM LAND ONE-HUNDRED SIX (106) OF THESE
- .D. NEW AND ARTISTIC PARTITIONS WERE UNSTALLED IN THE RECEPTION AREA ON THE FIRST FLOOR AND IN THE HALL OF ANATOMY ON THE SECOND FLOOR.
- E. INSTALLATION OF FLUORESCENT LIGHT CANOPIES IN SIXTY-FOUR (64) EXHIBIT CASES IN THE HALL OF PATHOLOGY WAS ACCOMPLISHED. ALTHOUGH THE INITIAL REQUEST FOR INSTALLATION OF THESE LIGHTS WAS SUBMITTED IN 1955, APPROVAL WAS NOT GRANTED UNTIL 1958. THE NECESSARY WIRING AND OUTLETS FOR THIRTY-FOUR (34) OF THESE CASES WERE INSTALLED BY
- F. RAPPORT WAS ESTABLISHED WITH THE SUPERINTENDENT OF THE GSA BUILDINGS ON THE MALL, WHICH HAS BEEN TO THE ADVANTAGE OF THE MUSEUM. WITH MORE FREQUENT AND CARE-FUL ATTENTION TO MAINTENANCE PROBLEMS, PAINTING OF THE STAIRS AND CEILINGS IN THE FRONT FOYER, AS WELL AS IN THE LABORATORY AND WORKSHOP AREAS, THE MUSEUM HAS ATTAINED A CLEANER, FRESHER APPEARANCE. INOPERABLE WINDOWS HAVE BEEN PUT IN WORKING CONDITION; THREE (3) ADDITIONAL FANS AND SEVEN (7) AIR CONDITIONING UNITS WERE INSTALLED, BY GSA, AT NO COST TO THE AFIP, ALL OF WHICH HAS IMPROVED THE VENTILATION PROBLEM.
- G. GUEST EXHIBITS SHOWN DURING THE YEAR WERE "TRAUMATIC AFFECTIONS OF THE SHOULDER" AND "THE INFLAMED EYE" LOANED BY MERCK, SHARP AND DOHME AND "A CENTURY OF NAVAL MEDICINE" LOANED BY E. R. SQUIBB AND SON. MR. LEO PASCAL, COLLECTOR AND HISTORIAN, LPANED SEVERAL ITEMS PERTAINING TO PRESIDENT ABRAHAM LINCOLN, WHICH WERE PLACED ON EXHIBIT.

- H. A SIXTEEN-BLADE (16) SCARIFICATOR WAS DONATED TO THE MUSEUM BY MR. AND MRS. B. WOODRUFF ON BEHALF OF THEIR UNCLE, COLONEL THEODORE BARNES, USA (RET). THIS WAS ACCEPTED BY THE DIRECTORATE AT A SMALL CEREMONY HELO IN THE OFFICE OF THE CURATOR. OTHER DONATIONS DURING 1959 INCLUDED: SIX (6) MICROSCOPES; AN EARLY 19TH CENTURY OPERATING TABLE; THIRTEEN (13) UNIFORMS WORN BY HIGH-RANKING OFFICERS DURING WW I, WW II, AND KOREA; A JAPANESE CEREMONIAL SWORD AND AN ARMY MEDICAL CORPS BRIGADIER GENERAL'S FLAG BY MAJOR GENERAL SILAS B. HAYS, SURGEON GENERAL; TWO (2) COPIES OF THE NEWSPAPER "THE AMERICAN SOLDIER" DATED 10 AND 17 SEPTEMBER 1898; A CIVIL WAR FIELD DESK DONATED BY MISS MARGARET JANEWAY BILLING, DAUGHTER OF DR. JOHN SHAW BILLINGS, CURATOR OF THE MUSEUM IN 1883-1893.
- I. SEVERAL NEW ITEMS OF MACHINERY WERE RECEIVED AND INSTALLED IN THE MUSEUM LABORATORY AND WORKSHOP AREA TO REPLACE WORNOUT AND OBSOLETE EQUIPMENT.
- J. A PROGRAM WAS INSTITUTED WITH THE PROFESSIONAL RECORDS SECTION, AFIP, TO PACKAGE THE ANATOMICAL SPECIMENS OF THE HUNTINGTON COLLECTION PRESENTLY IN CROCKS. This PROGRAM IS WELL UNDER WAY AND AT YEAR'S END ONE HUNDRED SEVENTY-TOUR (174) SPECIMENS HAD BEEN PACKAGED AND SEALED IN PLASTIC BAGS AND RETURNED TO THE MUSEUM.
- K. THE MOTION PICTURE PROGRAM PRESENTED TO THE PUBLIC ON SUNDAY AFTER-MOONS WAS CONTINUED THROUGHOUT THE YEAR.
- A SPECIAL SHOWING OF THE MAY FILM OF THE MONTH, THE HEART CRAPPLER.
 WAS HELD BY REQUEST FOR THE SEXTH GRADE CLASS AND THEIR TEACHER OF THE YORKSHIRE
 ELEMENTARY SCHOOL, MANASSAS, VIRGINIA.
- L. One member of the Staff of the Museum Was Trained in the Army-Projectionist School in order to maintain a Pool of Available Projectionists for this Program.
- M. ONE (1) MEMBER OF THE STAFF, MR. MYRON C. MILLER, RECEIVED A "SUPERIOR ACCOMPLISHMENT AWARD." MISS CLEO A. WARREN, SECRETARY TO THE CURATOR, RECEIVED A LETTER OF COMMENDATION FROM CAPTAIN WILLIAM M. SILLIPHANT, MC, USN, THE DIRECTOR OF THE INSTITUTE DURING THE FIRST EIGHT (8) MONTHS OF THE YEAR. EIGHT (8) MEMBERS OF THE MUSEUM STAFF WERE PRESENTED WITH SERVICE PINS FOR SERVICE PERIODS FROM TEN (10) TO TWENTY (20) YEARS EACH.

4. INTRA AND INTERSERVICE.

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- A. COOPERATION AND/OR COORDINATION WITH FEDERAL, CIVILIAN, AND FOREIGN AGENCIES WAS MANIFESTED IN MANY WAYS.
- B. EXHIBITS WERE SUPPLIED TO VARIOUS HOSPITALS, HEALTH, AND EDUCATIONAL AGENCIES FOR TEACHING AND DISPLAY. A PANEL EXHIBIT "THE EVOLUTION OF THE CYSTOSCOPE" WAS PREPARED AND SHOWN AT THE ANNUAL MEETING OF THE AMERICAN UROLOGICAL ASSOCIATION IN ATLANTIC CITY.
- C. A NUMBER OF MUSEUM ITEMS WERE LOANED TO THE MUSEUM BRANCH, NATIONAL CAPITAL PARK SERVICE, FOR INCORPORATION IN BATTLEFIELD EXHIBITS IN NEW MEXICO.

D. Support was provided the WRAMC Television Division in supplying suitable material for various closed-circuit telecasts. These included "The Small Watcher," a history of the development of the microscope, the "History of Roentgenology," the "AFIP Story."

E. THE LABORATORY CONTINUED TO RENDER CENTRALIZED MACROPATHOLOGICAL SERVICE TO QUALIFIED REQUESTORS. SPECIMENS WERE MOUNTED FOR TRAVIS AIR FORCE BASE; ARMY CHEMICAL CENTER; VETERINARY SECTION, U. S. ARMY MEDICAL UNIT, FORT DETRICK; KANSAS UNIVERSITY MEDICAL CENTER, KANSAS CITY; ANDREWS AIR FORCE BASE HOSPITAL; USAF HOSPITAL MAXWELL, AIR UNIVERSITY, MAXWELL AIR FORCE BASE.

Two (2) BISON SKULLS WERE PREPARED FOR THE MUSEUM LABORATORY, NATIONAL PARK SERVICE.

- F. ONE HUNDRED ELEVEN (!!!) COPIES OF THE MANUAL OF MACROPATHOLOGICAL TECH-NIQUES WERE DISTRIBUTED ON REQUEST TO BOTH MILITARY AND CIVILIAN INSTALLATIONS AND INDI-VIDUALS.
- G. FILES AND ARCHIVAL MATERIAL THAT HAD BEEN HOUSED IN THE OFFICE OF THE HISTORIAN-ARCHIVIST, AFIP, WERE TRANSFERRED BACK TO THE MUSEUM BECAUSE OF THE RESIGNATION OF MR. MORRIS C. LEIKIND, HISTORIAN-ARCHIVIST.

5. TRAINING.

The Museum Laboratory continued to offer three organized courses of instruction in the science and technique of macropathology. One course of three and one-half $(3-\frac{1}{2})$ months duration was given to Mr. Jesus E. Maudonado of Central University, Caracas, evenezuela, during which time he successfully mastered the basic principles of tissue preservation, plastic fabrication, and specimen mounting. Six (6) other students availed themselves of this training but for periods of one (4) week only. In addition, fifteen (15) persons were given training to a minor degree in Laboratory techniques.

6. PUBLICATIONS.

THE ARTICLE INDICATED BELOW BY ONE OF THE MUSEUM STAFF WAS PUBLISHED:

PURTLES HELENHRES UBOLOGIO INSTRUMENTO OLLECTION THE STANDOLOGY ... MEDICAL MUSEOM OF ARMED FORCES (NETETOF PATHOLOGY ...

7. VISITORS.

Visitors to the Medical Museum totalled three hundred sixty-three thousand, one hundred thirty-six (363,136) ouring 1959, one hundred fourteen thousand, seven hundred fifty-two (114,752) more than 1958, which previously had been the highest on record. Every State and Territory of the United States was represented, as were more than fifty (50) foreign countries.

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E. MEDICAL MUSEUM

Organization and Mission: The Medical Museum of the Armed Forces Institute of Pathology is dedicated to the collection, preservation, and display of selected medical material of military, historical, and scientific value to provide instruction for the men and women of the Armed Forces, research and teaching facilities for the medical profession, and information for all.

The Professional (Cornell) Museum has been divided into six (6) study museums, one each for: Neuropathology; Genito-Urinary; Obstetrics, Gynecology and Breast; Cardiovascular; Orthopedic; and Skin and Gastrointestinal Pathology.

In December, the Medical Museum was relocated from Independence Avenue at 9th Street, S.W., to Jefferson Drive, between 6th and 7th Streets, S.W., on the Mall.

The Medical Museum was reorganized from two (2) divisions (Professional and Public) to three divisions (Teaching, Laboratory, and Operations).

Visitors to the Medical Museum totalled 586,697 during 1960. This was a gain of 223,561 over 1959, which had been the highest on record. Every State and Territory of the United States was represented, as were more than fifty foreign countries.

<u>Personnel</u>: The quantitative requirements for personnel remained below par throughout the year. Vacancies that occurred throughout the year were filled, but only after many months delay. The position of Chief of the Laboratory Division remained vacant for the second consecutive year.

Developments: The long anticipated closing of Chase Hall for purposes of demolition became an actuality in December, and the Museum once again had to accept temporary quarters, this time in a temporary building on Jefferson Drive, between 6th and 7th Streets, S. W., on the Mall. This building is not only inadequate for Museum purposes, but it is shared

with two other tenants, the National Capital Parks Museum Laboratory, which occupies one entire wing, plus additional offices on the first floor, and the Food and Drug Administration, Department of Health, Education, and Welfare, which occupies the entire second floor. It is still hoped that the Museum will be given its old home on Independence Avenue at 7th Street, S.W. when the present occupants, the National Library of Medicine, move in the fall of 1961.

A letter was sent to The Surgeon General,
Department of the Army, 18 August, requesting his
concurrence in the initiation of action toward construction of a new building for the Medical Museum.
A lst Indorsement to this letter stated that action
would be taken to include a request for authorization
and funding of a new Medical Museum in the FY 1963
MCA Program and, for planning purposes, direct liaison
between representatives of the Medical Museum and the
Director of Plans, Supply, and Operations of The
Surgeon General's Office was approved.

Proposed building and space requirements, together with the concept and justification for a new building for the Medical Museum, were submitted to The Surgeon General on 17 November 1960.

The Medical Museum continued to present exhibits showing current advances in medical research and development. New exhibits showing the accomplishments of the military in the field of medicine continue to be an incentive for visitors to return frequently. During 1960, 431 exhibits were presented, and 77 of these were new or refurbished.

The Superintendent of the GSA buildings worked in close harmony with the Museum to improve the appearance of Chase Hall. Exhaust fans and screens were installed, the loading platform was repaired, the entire first floor was redecorated, and the floors on the second floor were reinforced before word was received of the imminent move.

<u>Intra and Inter-service</u>: Assistance was given to Federal, Civilian and Foreign agencies in several ways:

Exhibits were loaned to various hospitals, health and education agencies for teaching and display. Panel exhibits were prepared and shown at the annual meetings of the American Medical Association and the American Urological Association.

Museum items were loaned for incorporation in Civil War Centennial exhibits in Richmond, Virginia, and in New York City. Other museum items were loaned to Wyeth Laboratories for incorporation in their exhibit "Progress of Medicine."

Support was provided the WRAMC Television Division in supplying material for various closed-circuit telecasts.

Training: The Museum Laboratory continued to offer three organized courses of instruction in the science and techniques of macropathology. Twenty-eight (28) Air Force enlisted personnel of the AFIP Histopathology Courses received one week's instruction in gross mounting procedures. Dr. Jae S. Littrell, Assistant Professor, Department of Anatomy, Howard University, received four weeks' training in museum laboratory procedures. In addition, sixteen (16) individuals spent varying amounts of time observing museum techniques.

MEDICAL MUSEUM

John W. Sheridan, Colonel, MSC, USA, Curator

A. ORGANIZATION:

The Medical Museum of the Armed Forces Institute of Pathology is dedicated to the collection, preservation, and display of selected medical material of military, historical, and scientific value to provide instruction for the men and women of the Armed Forces, research and teaching facilities for the medical profession, and information for all.

B. PERSONNEL:

- 1. The Medical Museum continued under the direction of Colonel Albert E. Minns, Jr., as Curator until his retirement on 30 June. Captain Roger H. Fuller, MC, USN, Deputy Director, assumed the duties of Acting Curator from 1 July until Colonel John W. Sheridan, MSC, USA, reported for duty as Curator on 23 October.
- 2. Colonel Melvin V. Schlaak, MSC, USA, Assistant Curator since 28 November 1960, retired on 31 March.
- 3. Personnel assigned to the Museum as of 31 December 1961 were:

Military - 4

Civilian - 10

C. <u>DEVELOPMENTS</u>:

l. During the year, close contact was maintained with General Services Administration and the Department of the Army relative to procuring for the Museum the building now occupied by the National Library of Medicine. A letter and floor plans were submitted to DOD with justification for the need of the entire building.

Colonel Frank M. Townsend, USAF, MC, The Director, Colonel Joe M. Blumberg, MC, USA, Deputy Director, Colonel Albert E. Minns, Jr., Curator, Mr. Roland L. Marchand, Senior Architect, and Mr. David M. Johnson, Chief, Projects and Plans Branch, WRAMC Engineer Division, inspected the Library building to determine the minimum repairs and alterations that would be necessary should the building be allocated to the Museum. A letter was subsequently sent to DOD and GSA outlining these minimum requirements.

At the end of the year, no definite commitment had been made relative to the allocation of the library building.

- 2. Lt. Colonel Vernon McKenzie, MSC, Chief, Directives and Policies Branch, Operations Division, OTSG, DA, was designated action officer by The Surgeon General to follow through on progress of Bill S. 3846 (to establish a National Museum of Military History), Eighty-sixth Congress. It was learned that a letter prepared by the Chief of Military History to the Honorable Carl Hayden, Acting Chairman, Committee on Rules and Administration, for signature by the Secretary of Defense, was not forwarded by the Secretary, since Bill S. 3846 died with the termination of the Eightysixth Congress. It was also learned that Bill H. R. 1134, a substitute for Bill S. 3846, was introduced in the Eightyseventh Congress. Lt. Colonel McKenzie maintained contact with the Curator and assured him that all legislative liaison groups were informed of our interest in the bill and that the Museum would have opportunity to offer suggestions for the protection of the rights of the AFIP.
- 3. Tempo S was maintained in good condition by GSA. A ramp was installed at the west entrance for the use of handicapped visitors, and safety treads were installed on the stairs at the entrances. Serious leakage in various areas were repaired but only after several exhibits had been water-soaked.
- 4. Air conditioning units and exhaust fans were installed in the laboratory.
- 5. One hundred nine medical officers and civilian physicians spent time in the various study museums. In addition, twenty-two medical officers reviewed the osteologic specimens in the Orthopedic Study Museum and four physicians reviewed the neurologic and urologic specimens prior to taking their specialty board examinations.
- 6. A concerted effort was made by the Accessions and Loan Branch of the Museum to convert all accessions bearing Museum numbers back to the AFTP accessioning system. Due to insufficient personnel in this branch, only about one-third of the total project has been completed.
- 7. The preparation of the history of the Institute tentatively entitled, "The Armed Forces Institute of Pathology: Its First Century," by Dr. Robert Selph Henry, continued throughout the year. Two meetings of the Editorial Advisory Board for the history were held during which the development of the narrative was reviewed and photographic illustrations of the text were discussed. At the close of the year, Dr. Henry had completed the first draft of fourteen chapters.

- 8. Chaplains from the Public and Ecclesiastical Relations Advisory Group met with Captain Roger H. Fuller, MC, USN, Deputy Director, for the purpose of planning an area in the Museum to illustrate the role of the Chaplain in the Armed Forces.
- 9. Dr. Oscar W. Richards, Consultant, had a five-day tour of duty during which he reviewed the first draft of the microscope catalogue, and made the recommendation that it be published with the least possible delay.
- 10. The Museum continued to emphasize current advances in military medical research and development, and during the year over six hundred exhibits were displayed. These included 72 new and 344 refurbished exhibits.
- ll. The Hall of Pathology was rearranged to better provide specific areas for the various pathology specialties of the AFIP. The Hall of Geographic Pathology was assigned to Dr. Chapman H. Binford. These areas will be maintained in accordance with the suggestions of the AFIP pathologists.
- 12. A diorama, the central theme of the Centennial Exhibit, and the Introduction Panel were installed in Wing 2 by MIS. To date, no additional sections of this exhibit have been installed.
- 13. A heart model, made by Lt. Anan Phakdeephan, Curator, Medical Museum of the Royal Thai Army Institute of Pathology, Bangkok, Thailand, while studying in the Sculpture Laboratory, MIS, was presented to the Museum.
- 14. A gas analysis machine was transferred from the U. S. Navy Experimental Diving Unit.
- 15. An original Confederate Battle Flag lent by Mrs. Robert H. Moore, Gonzales Memorial Museum, Gonzales, Texas, was installed in the Centennial Room.
- 16. The Medical Museum Panel of the Scientific Advisory Board of Consultants to the AFIP met in the Museum to discuss Museum problems. They were in accord that the Museum needed more space and felt that a determined and concerted effort should be made to have the building now occupied by NIM assigned to the Museum. They also made the recommendation that the catalogue of historic microscopes should be published.

17. A conference relative to the AFIP Centennial Program was held in the Museum by the Program Committee. In attendance were: Dr. Chapman H. Binford, Dr. Esmond L. Long, Lt. Colonel Edward H. Johnston, MC, USA, Dr. William C. Manion, and Dr. Richard M. Follis, Jr.

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- 18. A mobile composed of plastic lens elements of corrected optics of the microscope, made and given to the Museum by Mr. Burton Dezendorf, was installed in Microscope Hall.
- 19. The motion picture program, which had been temporarily discontinued since moving into Tempo S, was reactivated in October with a series of films on First Aid.
- 20. Accessions during 1961 included a World War I ambulance which was transferred from the U.S. Army Ordnance Museum, Aberdeen Proving Ground, Aberdeen, Maryland.
- 21. A Colorimeter, made in 1912 by the Russell Sage Foundation for experimental purposes, and a Pettenkofer-Voit apparatus used for experimental animals were received from the National Institutes of Health.
- 22. Eighteen wax models showing various skin diseases were received from the College of Physicians, Philadelphia.
- 23. Uniforms and related items were received from the World War I Reconstruction Aides Association and from individuals in the Medical Corps, USA, and USN, Army Nurse Corps, and Medical Service Corps.
- 24. In addition, microscopes, surgical, and diagnostic instruments and historical material were received.
- 25. The Upjohn Company offered the Museum a functional schematic model of the Brain. As this would require a ceiling height of 15 feet, the offer was declined pending moving to larger quarters.
- 26. Mr. Samuel Kier and Mr. Gordon T. Harrell were presented with 20-year service pins and certificates. Miss Cleo A. Warren received a Certificate of Superior Performance, and Mr. Myron C. Miller received the Department of the Army Outstanding Employee Rating.

D. INTRA- AND INTER-SERVICE:

l. Material was loaned to Wyeth, Inc., for their exhibit "Pavilion of Medical Progress," to the Richmond Academy of Medicine for the Centennial Exhibit, and to the B'nai B'rith Museum for the exhibit "American Jewry and the Civil War."

- 2. The Tissue Processing Section of Professional Records, Department of Pathology, was moved from the AFIP to the Museum and located in Wing 1.
- 3. An operating segment of Radiation Pathology, AFIP, was located in Wing 6 of the Museum.
- 4. Files from the Illustration Library, MIS, were sent to the Museum for storage.
- 5. Space was made available for the installation of a section of the Histo-Laboratory, AFIP.
- 6. Colonel Minns served as a member of the Officer's Promotion Board, DA, TAG.
- 7. The loan of the portrait of Dr. John H. Brinton, first Curator of the Museum, to the National Gallery of Art has been extended to 31 July 1962.
- 8. M/Sgt. Julia L. Williams attended the Projectionist School, Fort Myer, Virginia.
- 9. The Museum Laboratory continued to render macropathological service to approved requestors. Specimens were mounted for Brooke Army Hospital, U. S. Naval Medical School, Walter Reed General Hospital, Walter Reed Army Institute of Research, and the Department of Agriculture.
- 10. Two hundred thirteen (213) copies of the Manual of Macropathological Techniques were distributed on request.
- ll. Lt. Colonel Austin W. Morrill, Jr., MSC, USAR, Preventive Medicine Division, OTSG, requested assistance in producing entomological study sets. The services of the Museum Laboratory were extended to him.
- 12. A commemorative coin minted by Herod 2,000 years ago was embedded in plastic for the Smithsonian
- 13. Assistance was given to Colonel Austin Lowry, Jr., MC, Chief, Ophthalmology Service, WRGH, in designing pilot models of economical reading lenses. Two lenses of a single design were fabricated for experimental use.
- 14. An ancient metal surgical knife was embedded in plastic for Major General Oliver K. Niess, USAF, MC,

- E. TRAINING: The Museum Laboratory continued to offer three organized courses of instruction in the science and technique of macropathology, fifty-six persons received instruction in gross mounting procedures, including fourteen students from the Histopathology-Techniques Course 61A (for 4 days) and eleven from Course 61B (for 7 days).
- F. Visitors to the Medical Museum totalled 684,606 during 1961, the highest number recorded for any year. This was a gain of 97,909 over 1960. Every State and Territory and nearly every foreign country were represented.

1.

MEDICAL MUSEUM
John W. Sheridan, Colonel, MSC, USA, Curator

A. ORGANIZATION:

The Medical Museum of the Armed Forces Institute of Pachology consists of the Curator's office and three divisions: Education, Operations and Laboratory.

The Museum is dedicated to the collection, preservation and display of selected medical materials of military, historical and scientific value to provide instruction for the men and women of the Armed Forces, research and teaching facilities for the medical profession, and information for all.

B. PERSONNEL:

- 1. The Medical Museum was under the direction of Colonel John W. Sheridan, MSC, USA, throughout the year.
- 2. Personnel assigned to the Miseum as of 31 December 1962 were:

Military: 12

Civilian:

.C. DEVELOPMENTS:

- L. The building at 701 Independence Avenue, S. W. created for the combined use of the Army Medical Museum and Library in 485%, and occupied solely by the Library since 1954, was allocated to the Department of Defense by General Services Administration in January 1962. Because of much higher priorities for other new defense construction and the great suitability of the library building, it was accepted.
- Avenue was begun in May and finalized in December. Expenses for the move were borne by the Office of Space Management Service, Office of the Secretary of the Army. General Services Administration assumed the responsibility for making the building safe and provided a minimum of interior decorating. To date the building has been made water proof and the corridors and exhibit halls on the first and second floors have been painted. The book stacks were removed from the East Wing and new floor tile was laid.

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- 2. In addition to the Museum, many other activities of the AFIP were moved to 701 Independence Avenue.
- 4. Seventy-three medical officers and physicians availed themselves of the study rooms installed in Tempo S. The Orthopedic Branch of the Department of Pathology held two classes in the Museum -- one in Tempo S, and one in the Museum's present quarters. Fifty-one physicians reviewed the orthopedic, neurologic and urologic specimens prior to taking their speciality board examinations.
- 5. The history of the Institute, entitled The Armed Forces Institute of Pathology: Its First Century, 1862-1962, by Dr. Robert Selph Henry was completed and submitted to the Historical Unit, Forest Glen, on 19 November.
- 6. On 13 November the Medical Museum held a "black tie" Open House to observe its Centennial. A 100-foot exhibit, designed and constructed by the Medical Illustration Service, depicting the early history and collections of the Museum, was inscalled. The Worth-South Skirmishers lest a variety of Cavid War exhibits and, with a segment of the Army band, provided music for the evening. Over 700 invited guests were present.
- L. Twelve eight-foot stone statues representing important figures in medicine were given to the Museum by Dr. and Mrs. Bernard Appell. These statues, sculptured by Mrs. Doris App. 11 will be installed in the West Wing, second floor.
- 8. A collection of stamps of medical interest was transferred from the National Library of Medicine to the Museum collection.
- 9. A reproduction of the portrait of John M. Brinton, first curator of the Museum, was loaned to the Museum by the National Gallery of Art. This has been hung on the stain landing second floor, in lieu of the original which is on loan to the National Gallery.

D. INTRA- AND INTERSERVICE:

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1. Four microscopes were loaned to the Smithsonian Institution for incorporation in an exhibit under preparation for 1.63 mg. building. Other medical instruments were loaned to the National Institutes of Health for display, and to the Wyoth Company for their annual exhibit which is prepared primarily for display at the Association meeting. Four microscopus were loaned to the Jules Power Productions in New York for an ABC celevision program "Discovery" on 24 December.

- 2. Civil War items were loaned to the U.S. Maval Hospital, Annapolis, Maryland, for display in the State Capital for the Maryland Civil War Centennial, and to the Museum of Fine Arts, Boston.
- 3. The publications "What's this About a Laboratory Test?", "Should you be a Medical Technologist?" and "The Profession of Medical Technology" were received from the American Registry of Pathology and placed on sale at the Museum.
- 4. Specimens were mounted for the National Naval Medical Center, Eethesda, Brooke Army Medical Center, Fort Sam Houston, Texas, Georgetown University School of Medicine, as well as for other governmental agencies and private physicians. A total of 293 specimens were newly mounted or refurbished in spite of the fact that the Museum Laboratory was below personnel ceiling and was not in operation for three months during the move. Eighty students received laboratory training during the year.
- 5. Two hundred and four copies of the Manual of Macropathological Techniques were distributed on request.

E. TRAINING:

The Museum diaboratory gave instruction in macropathology techniques to 41 persons.

F. VISITORS:

Visitors to the Medical Museum totaled 531,297 during 1962, a decrease of 53,409 from the previous year.

Lt. Colonel David Auld, USAF, MC, Curator Captain Alan B. Cooper, USAF, MC, Assistant Curator

ORGANIZATION. - The Medical Museum was organized into a curator's office and two divisions during 1963. The Plans Division consisted of the Accessions Branch and Research and Education Branch, and the Operations Division of the Information Office, Construction and Maintenance Branch and Laboratory Branch.

PERSONNEL. - In May 1963 Lt. Colonel David Auld, USAF, MC, was named Deputy Director of the Armed Forces Institute of Pathology with the additional duty as Curator of the Medical Museum. Colonel John W. Sheridan, MSC, USA, the previous Curator, was reassigned in August 1963, at which time Captain Alan B. Cooper, USAF, MC, was named Assistant Curator.

<u>DEVELOPMENTS</u>. - A Medical Museum Workshop held on 19-20 February 1963, and the meeting of the Board of Governors of the AFIP, 24 October 1963, provided guidance toward a major reorganization and development and expansion program within the Museum itself. The following resolution was passed by the Board of Governors:

"It is resolved that the Medical Museum is of great importance both historically and scientifically and that appropriate steps be taken to strengthen and expand its position in the field of medical education and public instruction."

In September 1963, The Director, AFIP, issued a policy statement on the operation and mission of the Medical Museum as follows:

"The mission of the Institute as defined in the Charter is to 'maintain medical museums for the instruction of qualified and authorized persons and display openly selected museum exhibits to the lay public.' The Museum will be considered to consist basically of the gross pathology material of the Institute put on display for the benefit of the profession and the public. In addition, it will be a museum of disease in the broader sense, including the sciences of embryology, pathogenesis, morphology, diagnostic pathology, both clinical and anatomical, and military medicine. Specimens and objects relating to military matters only and with no medical significance will be eliminated.

"The Museum will consist of two parts -a public and a professional museum. public museum will tell the story of disease in the language of the layman, but with the dignity, veracity, and sophistication becoming the profession. The visitor will be greeted by a definition of the word "pathology," and will be guided in sequence through the history of medicine, embryology, pathogenesis, morbid anatomy, and diagnosis. He will observe the role of pathology in medicine, viewing both the commonplace and the spectacular. The tour will close with a look at the future. The professional museum will be a conservatory of medicine. Organized according to medical specialty, organ systems, and geographic distribution of disease, it will consist of a number of small study halls, each equipped with total resources for the study of disease: Appropriate gross specimens; microscope and microscopic slides; syllabi, atlases, textbooks, and reprints; x-rays and viewboxes, photographs and transparencies; audio-visual teaching aids, including tapes, film strips, recordings, and a motion picture library for showings when required in the projection room.

"As the Museum is an integral part of the Armed Forces Institute of Pathology and, in effect, just one expression of the total effort of the Institute, no attempt will be made to create a large independent staff to conduct museum business. The Museum will be operated by all the people of the Institute, and only a small force will be assigned the Museum to coordinate the efforts of the Institute in its museum endeavors. All the branches of the Department of Pathology will take the responsibility for creating and maintaining exhibits and study halls appropriate to their respective specialties and supplying the necessary specimens. The Medical Illustration Service will provide consultation in art and design to the various pathologists and technical support in the construction of exhibits. American Registry of Pathology will assist other groups in the preparation and distribution of study materials for the professional museum. The small permanent staff of the Museum proper will act to bring together all these resources and present them to the public and the profession in the form of an effective museum of pathology."

During the late summer of 1963, a complete reappraisal was made of the entire Museum. It was found to be badly in need of physical and professional repair if it were to resume its previous position of dignity and esteem in the museum world. The following changes were instituted to facilitate services to the public.

- a. A receptionist was located in the lobby to greet and assist visitors.
- b. Thorough cleaning of the walls, floors, and exhibits was accomplished as well as a general increase in the maintenance effort.
- c. The most extensive changes were made in the exhibit halls, where extraneous material related to military medicine or pathology was removed.
- d. The Centennial Hall, exhibiting Civil War material, was closed at the end of the centennial year, and pertinent material was displayed in other areas on the first floor. This hall was reopened with a completely new set of temporary medical exhibits of current interest in December 1963.
- ballistic, aerospace, and drowning displays were opened on the first floor in September 1963.
- f. The microscope collection was moved from its area in the Hall of Pathology on the first floor to a more suitable and impressive exhibit area on the second floor.
- g. The entire exhibit area on the second floor was re-evaluated, reorganized and augmented.

In August 1963 the Appel Statuary, which had been installed the latter part of 1962, was dedicated in an appropriate ceremony.

During the latter part of 1963 the entire microscope collection was completely catalogued and reviewed by Oscar W. Richards, Ph. D., Consultant, during his tour of duty, 18-29 November 1963. The catalogue emerging from this effort is a definitive work of this type and is in the final stages of preparation for publication.

All literature originating at the Museum in the form of pamphlets and other papers of public interest have been evaluated and those with the widest public interest are being reprinted. Other pamphlets are being prepared on current

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subjects of medical-pathologic interest.

A public motion picture program was reinstituted in the Museum auditorium. The auditorium itself was completed in 1963 on the first floor of the Museum.

In the area of laboratory research, new methods for the preservation of macropathological material have been investigated. Further experiments in the use of new silicone plastic embedment techniques have been initiated. In order to expedite the production of Museum specimens, prefabricated plastic containers are being evaluated. With the dimished working staff, these will be especially useful in increasing the production level of the laboratory.

In September 1963, a recataloging of the entire collection of approximately 100,000 items was initiated. These tissues, artifacts and memorabilia are being evaluated, accessioned and indexed piece by piece in order to prôvide an adequate system of bookkeeping and cataloging. This will replace the present filing system which is inadequate, and return the Museum catalogues to the high level achieved in the past.

Contacts were established with the National Institutes of Health, the Bureau of States Services, and military agencies within the Department of Defense for the procurement of loan material to provide interesting exhibits during the period of redevelopment. Seventeen major displays were exhibited through the cooperation of these sources and the Medical Illustration Service, AFIP.

A revitalization program which will require approximately five years has been initiated. Tentative long-range plans have been drawn up, in coordination with the Medical Illustration Service, for consideration by the Scientific Advisory Board and The Director, AFIP, to include redesigning the entire Hall of Pathology along contemporary Museum development plans, and building a permanent exhibit to house the extensive microscope collection.

The general long-range plans provide that the Museum will consist of three major halls; two on the second floor and one on the first. The Hall of Pathology will display material on a systemic basis. One hall on the second floor will have a historical and evolutionary motif, while the other will be devoted to the display of medical subjects of current interest.

A professional museum area with less emphasis placed upon exhibit technique and with more sophisticated material

has been planned for operation in conjunction with the proposed geographic pathology study rooms.

The area of fund procurement has been and continues to be an urgent matter for consideration. Financial support for the Medical Museum by means other than Department of Defense sources has been and is being investigated.

During the latter part of 1963, meetings of the Directorate, Armed Forces Institute of Pathology, and the General Services Administration firmed plans for refurbishing the entire AFIP Annex building and enhancing the facilities of the Museum itself. The areas discussed include adequate electric power for exhibits, central air conditioning, elevator installation, repainting, refurbishing and redecorating the interior and exterior of the building.

In October 1963, The Director, Armed Forces Institute of Pathology, requested the various branches of the Institute to assist in the design of and provide professional guidance for the various Museum exhibits within the province of their subspecialties. Close liaison between the Medical Museum and the Medical Illustration Service was established and most of the plans and development ideas were firmed during the latter part of 1963.

TRAINING. - Instruction was given in macropathology techniques to the students of the Medical Laboratory Procedures Course (Advanced). Students number 25 to 30 per year, and in addition to lectures and demonstrations, they also benefit from applicatory classes

Medical Museum provided specimens and support for the various courses given at the AFIP. For example, study rooms for neuropathology were provided with gross material for personnel attending the Neuropathology course, as well as others who came to prepare for examinations and engage in special studies.

The Museum provided consultation to the public in the form of replies to correspondence requesting information of a medical-historical nature. There were also numerous personal contacts with visitors to the Museum.

The Museum provided four exhibits for hospitals throughout the United States and specimens for several "No Smoking Seminars." The Museum also provided tours for high school students, individuals at the college level, and groups of student nurses by special arrangement. Every effort is being made to increase this type of activity.

Due to the large backlog of specimens, the major portion of the laboratory support was to the various branches of the Armed Forces Institute of Pathology. Production during the second half of 1963 doubled over the level recorded in the previous year. Special requests from other Government agencies to have specimens mounted were also complied with.

VISITORS. - The number of visitors to the Medical Museum during the year totaled 478,194, of whom 300 were foreign nationals.

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MEDICAL MUSEUM

Captain Elgin C. Cowart, Jr., MC, USN, Curator

ORGANIZATION. - The Medical Museum was reorganized in March, with the Plans Division being replaced by the Public Services Division, which is responsible for public information, contacts and documents. The Operations Division consists of the Records and Accessions Branch, Laboratory Branch, and Maintenance Branch.

<u>PERSONNEL</u>. - On 21 July Captain Elgin C. Cowart, Jr., MC, USN, was named Curator; Major Alan B. Cooper, USAF, MC, remained as Assistant Curator. A secretary to the Curator, a clerical assistant in the Records and Accessions Branch, and a permanent receptionist were employed, and a laboratory chief with wide experience in macropathological techniques was recruited.

DEVELOPMENTS. - The program towards development and expansion continued according to the operation and mission outlined by The Director, AFIP, in 1963.

A 5-year studgeted program was submitted for inclusion in the FY 66 budget. The program provides for the construction of 24-28 systemic mathology exhibits and 10 major mathology medical exhibits. The first of these, the Neuropathology exhibit, was completed and finstalled during the year. By the end of the wear molans for an exhibit on Pathology of the Genito-Uninary System were in preparation.

Plans for the microscope exhibit involving approximately 3,000 square feet of space were developed and materials for its construction purchased. By the end of 1964 construction was approximately 60 percent completed.

Research continued in the laboratory to explore new methods of specimen presentation. Most successful in this area was the use of new labels implementing photographic methods on positive film for insertion in specimen containers. Pre-fabricated containers were ordered which will expedite the production of specimens.

Supported by laboratory personnel a systematic project of relabeling and refurbishing specimens in the Hall of Pathology was initiated. In many instances these specimen exhibits will be reorganized.

Rotation and renovation of exhibits with an active maintenance program was continued. Older exhibits were dismantled and returned to the Scientist Illustration Division while the best of the remaining exhibits were selected for refurbishing.

Emphasis was placed on the preparation of a new Manual of Macropathological Techniques and an improved course of instruction for laboratory personnel. Laboratory students during the year numbered 17.

Recataloguing of the Museum collection continued, all items being carefully inspected and accessioned. There was a marked increase in the volume of loans and accessions.

Efforts were continued to maintain good liaison with other similar institutions in the Washington area. Approximately 50 to 60 major museums in the United States were contacted in order to study their methods of organization, accessioning, acknowledgement of gifts and means of procuring support. The results are now being evaluated.

Schools were encouraged to avail themselves of guided tours specifically tailored to their curriculums. The program has been very successful with approximately 50 tours given during the year. The motion picture program continued in support of the tours.

Pamphlets, city maps, and tourist guide books were screened and their publishers contacted whenever incorrect information concerning the Museum appeared. Twenty-three of the Museum pamphlets and leaflets were revised and reprinted.

Inquiries and requests from the public pertaining to medical historical subjects continued to increase. The number of visitors to the Medical Museum during the year totaled approximately 451,000.

Danger Report

MEDICAL MUSEUM

Captain Elgin C. Cowart, Jr., MC, USN, Curator

<u>DEVELOPMENTS</u>. - The program of development and expansion continued according to the Statement of Policy issued by The Director, AFIP, in October 1963.

Construction of the genitourinary pathology exhibit neared completion. Panels were constructed and specimens mounted, and the text prepared for final editing.

Basic construction of the microscope exhibit is approximately 80 per cent complete.

Plans were approved for an exhibit depicting the history of the Medical Museum and the AFIP. The exhibit will occupy approximately 1,500 square feet, and at the end of the year was approximately 30 per cent complete.

Plans for an orthopedic pathology exhibit were also approved.

The program of refurbishing and relabeling in the Hall of Pathology is approximately 40 persent complete. Plans to install displays depicting specific disease entities progressed with the completion of exhibits on weneral diseases and tuberculosis.

Instituted during the year was a program of preparing special exhibits of current interest such as an exhibit on cholecystitis and gallstones at the time of President Johnson's illness in the fall of 1965, and on coronary disease at the time of President Eisenhower's recent hospitalization. These exhibits will be placed in a prominent location for reasonable lengths of time following which they will be integrated into the Hall of Pathology.

It was discovered that a large number of the Museum's pathological specimens are in danger of deterioration. These specimens are predominantely those stored for long periods of time in the old black top containers. In many instances chipping or cracking of the glass containers or damage to the asphalt seals has resulted in evaporation or leakage of preservative fluid. A program has been instituted whereby these specimens will be transferred to plastic bags and cross-indexed according to organ system and pathologic diagnosis.

Revision of the Manual of Macropathological Techniques progressed. Compilation of reference material was completed and the basic outlist for the text developed.

Final editing of the manuscript for the volume pertaining to the Billings Microscope Collection was begun.

A total of 85 organized tours of the Museum was arranged for medical officer groups, professional visitors, science clubs and school groups.

The Museum's motion picture program was discontinued due to lack of interest on the part of visitors. This seemed to be due to a busy schedule on the part of visitors in their attempts to visit and see as many places as possible while in Washington.

There were 543, 680 visitors to the Museum during the year.

Over 300 written requests for information were received ranging from simple request for information concerning a specific subject, to requests for copies of the Manual of Macropathological Techniques or other information pertaining to the preservation of specimens.

There were 18 requests for loan items. Most of these represerrequests for sizable numbers of individual items to be used in the preparation of historical exhibits

Captain Elgin C. Cowart, Jr., MC, USN, Curator

DEVELOPMENTS. - The program of development for the Museum continued according to the Statement of Policy issued by The Director, AFIP, in 1963. Of great import was the acquistion of 93 microscopes from a private collection in Europe. Most are 18th century instruments; the extremes being 1675 and 1865. The Medical Museum collection now numbers 600 instruments, about one-third of which will be used in the new exhibit to depict the development of the microscope.

HAAS COLLECTION

Basic construction of the permanent microscope exhibit was completed. By year's end installation of instruments, text and illustrations was 50 percent complete.

The script for the genitourinary pathology exhibit was completed, as was the manuscript for the volume pertaining to the Billings Microscope Collection; the latter was turned over to the printer in December.

The exhibit on History of the Medical Museum and Armed Forces Institute of Pathology is now 60 percent complete.

The plans to transfer stored specimens from black top glass containers to plastic bags were postponed to allow cooperation with the Federal Committee on Pest Control in a project requiring samples of certain tissues which have been sealed since prior to 1942. The program to salvage specimens in danger of deterioration continued.

Special exhibits on Diseases of the Larynx and on Doctor Peyton Rous, co-winner of the 1966 Nobel Prize in Medicine, were prepared and displayed, the latter in cooperation with the Registry of Noteworthy Research in Pathology.

The Laboratory staff conducted a 2-day workshop on "Museum Technics" as part of the program of the Commission on Medical Technology of the American Society of Clinical Pathologists.

During the year there were 765, 157 visitors; 114 conducted tours; 277 written requests for information; and 31 requests for loans of materials.

Public Law 89-746 of 2 November 1966, authorizes the Secretary of the Army to construct an addition to the existing Armed Forces Institute of Pathology Building on the grounds of the Walter Reed Army Medical Center. The addition is to provide a facility for housing those functions, including those of the Medical Museum, presently carried out at the Armed Forces Institute of Pathology Annex located at Seventh Street and Independence Avenue, Southwest, Washington, D. C.

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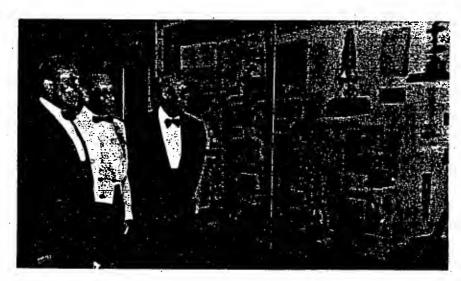
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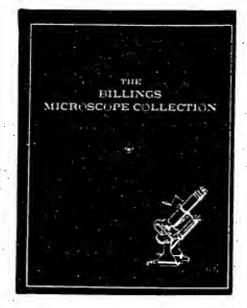
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MEDICAL MUSEUM CEREMONY



Viewing a portion of the exhibit, "Evolution of the Microscope," at the formal opening ceremony at the Medical Museum on 6 June are, left to right, Colonel John B. Coates, Jr., MC, USA, Commanding Officer, Valley Forge General Hospital and a speaker on the program; Major General Joe M. Blumberg, MC, USA, then The Director of the AFIP; and Dr. Stanhope Bayne-Jones.



"The Billings Microscope Collection" volume, a 210-page picturization and description of the Medical Museum's historic collection, was also introduced on 6 June at the exhibit ceremony.

With 395 illustrations, including four color plates, the volume presents a panorama of mechanical ingenuity and precision workmanship as represented by the nearly 600 instruments dating from 1590 to the present. Published by the American Registry of Pathology, one of the four departments of the Institute, the volume is unmatched in technical detail and historical information by any other publication of its type pertaining to a particular microscope collection.

Captain Elgin C. Cowart, Jr., MC, USN, Curstor

DEVELOPMENTS - Architects' plans for the new wing at the Institute, authorized in November 1966 by Public Law 89-746, were completed during 1967; they included plans for the "new" Medical Museum. Exhibit layout and content have been tentatively outlined. Funds for construction of the wing were appropriated in December by the 90th Congress.

The permanent exhibit, "Evolution of the Microscope," containing 285 instruments was completed, and the book, "The Billings Microscope Collection," was published in June. Both events were celebrated by an appropriate formal ceremony at the Museum on 6 June. (See photographs on previous page).

Among new 1967 accessions of particular note were a collection of Viet Cong weapons of war, a heart pump, four oil paintings of former Curators, and fourteen microscopes, including a 1948 RCA electron microscope. Special exhibits on bladder tumors, human malaria, Viet Cong weapons and carcinoma of the prostate were also displayed.

During the year there were 571,293 visitors and 118 tours were conducted.

Captain Elgin C. Cowart, Jr., MC, USN, Curator

DEVELOPMENTS - A ground-breaking ceremony for the new Medical Museum wing at the Institute was held on 22 March and construction commenced soon Instructions to vacate the AFTP Annex resulted in cessation of all new exhibit work except that in preparation for the new wing. Museum was officially closed to the public on 4 October at a formal ceremony. Dismantling of salvageable exhibits and packing occupied the staff until relocation into temporary quarters commenced on 2 December. Until completion of the new wing, estimated mid-1970, the Museum and the professional laboratories of the Department of Pathology that were in the Annex will be housed at 4200 Connecticut Avenue in Washington, Buildings 1, 8 and 29 of the old National Bureau of Standards site.

Development of the Historical Archives was given high priority during the year. Rapid progress was evidenced by the acquisition of 738 books and journals. This collection of volumes related to the history of pathology, microscopy and military medicine is expected to contribute significantly to the Institute's mission of education and research.

OF FIRCHIVES

Nine models of 19th century ambulances, hospital ships and railroad cars, such as were used for the transportation of the wounded, were obtained from the Army Medical Museum at the Medical Field Service School, Fort Sam Houston, Texas. The models had been on loan to the Museum there since the mid 1930's.

Thirty microscopes were added to the Billings Microscope Collection.

A motion picture film, "The Early Mechanical Development of the Microscope," featuring selected instruments from the Billings Microscope Collection, was made at the Museum in cooperation with the Photography Division, Medical Illustration Service, AFIP. The film was shown on closed circuit television at the annual meeting of the National Science Teachers Association and later placed in the AFIP Film Library.

The entire collection of dental instruments and artifacts was reviewed and catalogued in loose-leaf form.

The cooperative project begun in 1966 with the Federal Committee on Pest Control, requiring samples of certain tissues which had been sealed prior to 1942, was completed in October. In the course of this project, almost 300 tissue samples were taken from 67 pathological specimens to serve as controls in the analysis for pesticides in various biological materials.

From January until 4 October when the Museum building was officially closed, there were 280,000 visitors to the Museum, including 62 scheduled tour groups.

Captain Elgin C. Cowart, Jr., MC, U.S. Navy, the Museum Curator, was named a Fellow of the Royal Microscopical Society of London and joined a select group of some fifty Society Fellows residing in the United States. The Society was established in 1839 in England for the promotion, discussion and publication of observations and discoveries relating to the microscope.

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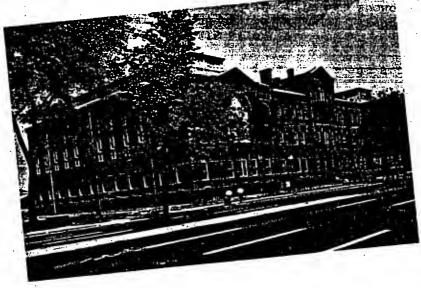


MG Elbert DeCoursey, USA (Ret.), The Director of the AFIP from 1950 to 1955, delivers the principal address at the official closing of the Medical Museum building on 4 October.

Captain Elgin C. Cowart, Jr., MC, USN, Curator of the Medical Museum, turns the key locking the door of the Museum building at the official closing.

In a nostalgic ceremony, staff members of all departments of the Institute, along with former Curators and Directors of the Museum and Institute, and invited guests gathered to observe the historic end of an era that began when the building, known as the "Old Red Brick", was first occupied in 1887.





The AFIP Annex (left), at 7th Street and Independence Avenue in downtown Washington, D.C., was first occupied by the Army Medical Museum as its fifth home in November 1887. Following the permanent closing of the building on 4 October, the Museum, research activities, and other elements of the Institute housed there began a move to temporary quarters to await the completion of the new Medical Museum addition to the AFIP building on the grounds of Walter Reed Army Medical Center scheduled for 1970.

MEDICAL MUSEUM

Helen R. Purtle, Acting Curator

The Medical Museum is dedicated to the collection, preservation, and display of medical material of scientific and historic value. It provides instruction for members of the Armed Forces, research facilities for the medical profession, and maintains displays for review and study.

Captain Elgin C. Cowart, Jr., MC, USN, Curator of the Medical Museum since August 1964, was reassigned to the hospital ship "USS Sanctuary" on 8 October 1969.

The Medical Museum has been housed in Buildings 1, 8, and 29 at the old National Bureau of Standards site, 4200 Connecticut Avenue in Washington, D.C. since January 1969. During occupancy of these temporary quarters, there has been no public display; however, some exhibits have been installed on the fifth floor of Building 1 for active use by students. Pending completion of the south wing to the AFIP building, which will contain the Medical Museum, the staff has devoted its energies to planning new exhibits. The Chief of the Scientific Illustration Division, Medical Illustration Service, was loaned to assist in preparation of new concepts and designs.

Six hundred and twenty-five publications relating to the history of pathology, microscopy, and military medicine have been acquired for the Museum's historical archives, and 19 microscopes have been added to the Billings Microscope Collection. A series of wax models showing oral cancerous lesions prepared by Captain William S. Bainbridge, MC, USN, a unique collection of early ophthalmological instruments and testing devices, and a cardiac pacer which belonged to General Dwight D. Eisenhower, are included in the 471 accessions of medical artifacts.

The Museum laboratory pursued an active program in the preparation of specimens for the proposed professional museum as well as mounting 78 specimens for use in the Institute's neuropathology course. Three physicians received a total of 72 hours of training in macropathology techniques. At year's end, four of the specialty pathology collections had been reviewed by the appropriate branch chiefs and their recommendations activated. Physicians, scientists, and medically-oriented laymen have successfully utilized the resources of the Museum's historical archives in search of highly specialized data. The loan program continued throughout the year and exhibits, medical illustrations, and/or artifacts have been furnished to medical societies, medical schools, military hospitals, and the National Library of Medicine.

Colonel Gordon W. Vacura, VC, USA, Curator

The Medical Museum collects, preserves and displays selected medical materials and artifacts of scientific and historical interest; develops research facilities in museum techniques for the medical profession; and presents information to the general public. The Center for Advanced Study in Pathology was established this year as a branch of the Museum to provide an educational facility for postdoctoral training.

The Museum staff devoted all available time in 1970 to the planning of exhibits for the new Museum. The Assistant to the Chief of the Medical Illustration Service for Museum Design was engaged in full-time designing of Museum exhibits. A contract was awarded for the construction of exhibits for the Halls of Instruments and Current Events at a cost of \$128,365.00. Specifications for the Hall of History were submitted to Purchasing and Contracting Branch, WRAMC, but at year's end, the bid had not been awarded.

Dr. Esmond R. Long served as Consultant to the Museum on several occasions and was of inestimable help in developing an exhibit on the History of Pathology. Division and branch chiefs of the Institute's Department of Pathology gave generously of their time in selecting suitable material for the Hall of Current Events. Several of the laboratory supply firms contributed furniture and equipment for the model of a modern histology laboratory.

Included in the 312 new accessions were: The oil portrait of General William A. Hammond, founder of the Army Medical Museum, which was transferred from the National Library of Medicine; an original diamond knife, developed by Dr. H. Fernandez-Moran in the early 1950's; collections of instruments and research materials from the estates of Dr. Peyton Rous, Dr. Jonas Fridenwald, Colonel Adam E. Schlanser and General Howard Snyder. Eleven microscopes, including three historic electron microscopes, were added to The Billings Microscope Collection.

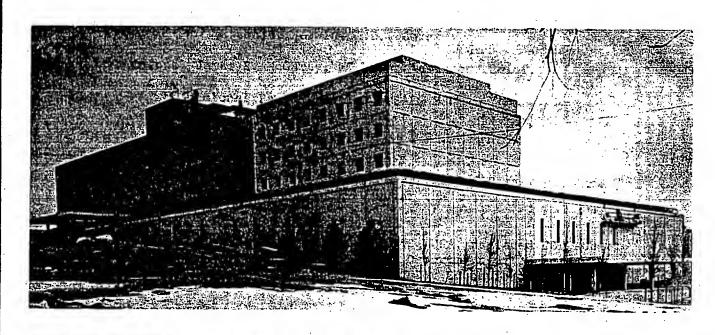
Sixty-five publications relating to the history of pathology, microscopy and military medicine were acquired for the Museum's Historical Archives, and approximately 200 books pertaining to the early history of the Museum were rebound.

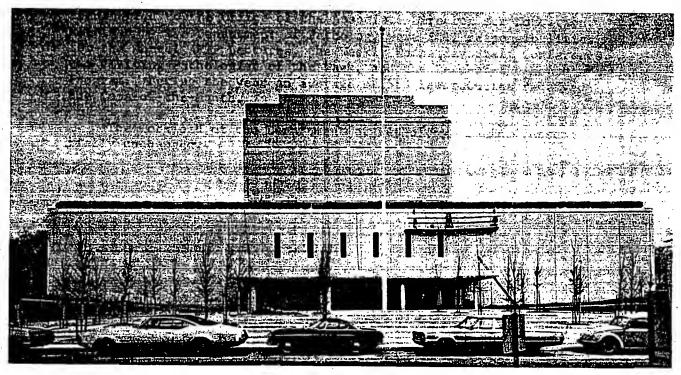
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Among the Museum items loaned during the year was the massive statue of Dr. Samuel D. Gross, loaned to the Jefferson Medical College, Philadelphia. Permission was given to the National Gallary of Art to send the Museum's oil portrait of John Hill Brinton, first Curator of the Museum, to the Whitney Museum of American Art for an exhibition of Thomas Eakins' works.

The Macropathology Laboratory mounted 206 specimens for display purposes and 57 specimens for the annual neuropathology course, as well as pursued an active program in the remounting and rebagging of storage items. Two students received a total of 48 hours of training in macropathology techniques.

MEDICAL MUSEUM WING NEARS COMPLETION





Two views of the Medical Museum wing to the AFIP building as it neared completion at the end of 1970. Reopening of the Museum is scheduled for 21 May 1971.

Colonel Gordon W. Vacura, VC, USA, Curator

The Medical Museum collects, preserves and displays selected medical materials and artifacts of scientific and historical interest; develops research facilities in museum techniques for the medical profession; and presents information to the general public.

A member of the Museum staff served as the contracting officer's representative in overseeing the installation of the Halls of Instruments and Current Events. Completion of the Hall of Pathology was a function of the staff. A contract for the construction of exhibits for the Hall of History was awarded on 27 January 1971 with installation to be accomplished by 1 May.

The Museum was formally reopened in its new facility on 21 May, the 109th anniversary of its founding, by the three Surgeons General of the military services with three of the four exhibit halls completed. The Brinton Hall of History was completed the latter part of July. A reception was held in this hall on 6 August for Judge Jasper Y. Brinton of Cairo, Egypt and his near relatives. He is the 93-year-old son of John Hill Brinton, the first Curator of the Museum.

The move from the Museum's temporary quarters in the old Bureau of Standards facility at Van Ness Street and Connecticut Avenue in Washington was accomplished by 1 August. During October shelving and cabinets were erected in the storage area of the Museum. At year's end, one-fourth of the Museum's accessions had been properly catalogued and stored.

During the first seven months, 28,216 people visited the Museum, including 72 groups given conducted tours. Guest speakers, who included MG Colin Vorder Bruegge, Commanding General of Walter Reed Army Medical Center; Mr. Myron J. Arnold, Public Health Advisor, Health and Consumer Education Division, District of Columbia Government; Captain Bruce H. Smith, Colonel R. C. Froede and Colonel M. V. R. Freeman of the Institute, gave lectures to various groups.

The Museum's loan program assisted the Fort Point Museum, Presidio of San Francisco, in selecting 50 items of medical interest suitable for their late 19th century dispensary.

Exhibit material on Walter Reed was lent to the Franklin Mint, Philadelphia, to be incorporated in their "Gallery of Great Americans." Other loans included anthropological instruments to the International Business Machines Corporation, New York; an early microscope to the Georgia Historical Commission for the Crawford W. Long Medical Museum; and medico-historical items pertaining to Dr. Robert Koch for Walter Cronkite's program, "You Are There," telecasted 4 December. Also, Mr. Peter Watkins, National Talent Company, New York, photographed historical items for use in a documentary film on the Battle of Antietam.

Accessions during the year included 5 antique microscopes, 2 electron microscopes, 28 surgical instruments, 26 plastic surgery models, 68 books on pathology and microscopy, and a series of medals on the history of medicine and dentistry. The National Library of Medicine presented an oil portrait of Surgeon General Joseph K. Barnes to commemorate the opening of the new Museum.

Designs for new exhibits on "Stroke," "Medallic History of Medicine and Dentistry," and "U. S. Army Nurse Corps" were forwarded to the Medical Illustration Service, AFIP, for construction.

During the latter part of the year and with the cooperation of Dr. Martin Rush of New Jersey, a program was instituted to solicit gross pathology specimens of museum quality from pathologists throughout the country.

A 4,000-word article on the history of the microscope for inclusion in the Encyclopedia of Microscopy and Microtechnique was prepared at the request of Dr. Peter Gray, University of Pittsburgh.

The Curator addressed the Civil War Round Table of the Vanderburgh Court House, Evansville, Indiana, on the "Role of the Medical Museum in the War of the Rebellion" and participated in a 15-minute radio interview in Owensboro, Kentucky. He was also a guest speaker at the Fifth U. S. Army Veterinary Training Conference at San Antonio, Texas. In addition, the Curator visited 29 museums in Texas, Kentucky, Pennsylvania and the District of Columbia.

Colonel Gordon W. Vacura, VC, USA, Curator

The Medical Museum collects, preserves and displays selected medical materials and artifacts of scientific and historical interest; develops research facilities in museum techniques for the medical profession; and presents information to the general public.

During the year a program of disease-oriented exhibits for the Hall of Pathology and revision of all window displays in the Institute building was begun. Thirty-five new or updated exhibits were designed and AFIP traveling exhibits were displayed.

An exhibit of historic items pertaining to the Army Nurse Corps was presented during February. The Commanding Generals of WRAMC and WRGH, the Chief of the Army Nurse Corps and representatives from Navy and Air Force Nurse Corps and 12 nurses who served in World War I attended the opening ceremonies.

The 25th anniversary of the Army Medical Specialist Corps was celebrated in the Museum in April. Special exhibits tracing the history of the Corps were displayed. Over 300 invited guests attended the opening, including the Surgeon General of the Army, the Commanding General of WRAMC and other high ranking dignitaries of the military services.

A new traveling Museum exhibit was shown at two scientific meetings.

The Museum participated in the Neuropathology, Genitourinary and Forensic Pathology courses of the Institute by making available specimens for study by the registrants.

Two collections of pathology specimens, consisting of almost 500 items, were contributed to the Museum. Request was made to the Directorate of Medical Materiel, Defense Personnel Support Center and Defense Depot, Mechanicsburg, PA, to donate medical materiel suitable for accessioning; several shipments of this valuable materiel were received. Other accessions during the year included microscopes, surgical instruments and medico-historic items. There were 462 publications donated to the Museum's Otis Archives.

A concerted publicity effort in behalf of the Museum was rewarded with radio announcements, several lengthy articles published in military and medical publications, weekly notices of special Museum activities in the local press, and entries in various tourist guides. Arrangements were made with the Atomic Energy Commission and the American Cancer Society to borrow films for showing to school groups.

Museum leaflets were distributed through the Smithsonian Institution, the National Archives, and the Gettysburg National Military Park. Loans of Museum items were made to the National Library of Medicine, University of Baltimore and other governmental and civilian agencies. Assistance was given to a newly established medical museum of the Nassau County Medical Examiners Office, Long Island, NY, with the loan of selected Museum items.

The Museum Laboratory became operable in April although equipment was not completely installed. It has continued routine refurbishing, embedding and wet-mounting for a total of 979 specimens.

The resources of the Otis Archives were made available to student historians, freelance writers, physicians, and teachers.

The Russell Auditorium of the Museum was used not only for organized visiting groups, but for professional classes and medical societies and organizations such as the D.C. Dietetic Association, the Washington-Baltimore Psychoanalytic Association, Medical Career Club and the Washington Society for the History of Medicine.

During the year there were 65,688 visitors including 173 school groups.



Colonel Gordon W. Vacura, VC, USA, Curator of the Museum retired from military service in June 1973, and Colonel Joshua E. Henderson, VC, USA was named Curator. Miss Helen R. Purtle, Museum Specialist, retired, and Mrs. Joyce W. Garris, Archivist, resigned during the year. Miss Purtle had a long and distinguished career on the Museum staff, and was an editor of the Billings Microscope Collection volume, the first of its kind, as well as custodian of the Museum's Billings Collection, the most comprehensive microscope collection in the world numbering nearly 700 instruments. She was also an expert on microscopes, particularly their history, mechanical components, and their part in the advancement of medical and scientific knowledge covering nearly four centuries.

There were 47 new exhibits designed during the year; 3,211 medical items were accessioned; hundreds of Museum items were sent on loan to 37 museums in the United States; 690 specimens were mounted; visiting professional and lay personnel received 144 hours of instruction in macropathological preservation techniques; and over 60,000 visitors, including 205 school groups, were guests in the Museum.

AMERICAN REGISTRY OF PATHOLOGY

The Registry continued to function in medical research and education linking the Institute to the civilian medical profession.

Colonel James L. Hansen, MC, USA was succeeded in July by Captain William A. Schrader, MC, USN as Scientific Director of the Registry.

In July the Registry's Loan Office was transferred to the jurisdiction of the Institute's Associate Director for Education.

Work continued on study sets. "Surgical Pathology, Part II" was completed in November and comprises 100 microscopic slides and a syllabus; a set on "Diagnostically Difficult Breast Lesions" and "Seminar on Gynecological Pathology" was donated by the Chicago Society of Pathologists; three new clinicopathologic conferences were prepared by the Institute's professional staff; and study sets in progress were ENT, General Gross Pathology, GU, and Skin Diseases of the Dog.

A new fascicle, "Tumors of Esophagus and Stomach" was published in October. Of the 32,789 fascicles of the first and second series sold in 1973, 12,325 were sent to 62 foreign countries and territories.



ARMED FORCES MEDICAL MUSEUM

When the Institute was reorganized in August, a reorganization of the Medical Museum was also effected, creating a Museum Support Services in addition to the existing staff elements. At the same time the name of the Museum was changed to Armed Forces Medical Museum.

Chauncey G. Bly, M.D., Deputy Curator, and Miss Ann E. Heslop, Archivist, joined the staff in October. Paul Ng Tuan Tee, a Malaysian museologist, began a year's training fellowship in July sponsored by the International Rotary Foundation.

The largest acquisition of the year was the distinctive Yakovlev Collection consisting of 250,000 stained gross and microscopic slides from 900 normal and pathological brains and spinal cords with viewing instrumentation appertaining. Additionally, 2,700 medical items were acquired and accessioned. The loan program was especially active due to the Nation's impending Bicentennial celebration.

The Museum's laboratory processed and / or prepared 550 projects and specimens and conducted 400 hours of special training in macropathological preservation techniques.

Approximately 50,000 visitors viewed the displays of the public museum prior to 31 October when the Museum was closed. Displays were placed in storage to permit two of the four main halls to be converted to offices, classrooms and laboratories incident to the needs of temporary quarters for the Uniformed Services University of the Health Sciences which will begin operations in the fall of 1975. The Museum closure is expected to continue for approximately two years or until permanent buildings are constructed elsewhere for the new university.

Annual Report 1975



ARMED FORCES MEDICAL MUSEUM

Chauncey G. Bly, M.D., Associate Director

Colonel Joshua E. Henderson, VC, U.S. Army, Curator of the Museum, retired from military service in May and Chauncey G. Bly, M.D. was named to succeed him. Later in the year, the title of Curator was changed to that of Associate Director for the Armed Forces Medical Museum.

Following the manpower survey in the fourth quarter of the year, the Museum was reorganized into three divisions, Collections, Professional Services, and Technical Services.

Despite the fact that the display halls of the Museum were closed to the public, some 3,200 inquiries and consultation requests were received relating to pathology, microscopes and other instruments, and military medical history. More than 19,800 medical items were acquired during the year and 1,500 were accessioned, the largest group being that from the estate of Pulmonary Pathologist A.J. Vorwald. The Museum's loan program continued with some 150 loans in connection with the United States' Bicentennial, and in the providing of exhibits and programs for the Department of the Army events of 14 June, and those of the U.S. Army Medical Department, Military District of Washington, and Walter Reed Army Medical Center on 27 July. In a recent inventory of the Museum's 19 collections, it was noted that the number of items now totals more than 412,000.

In the Professional Services Division a major exhibit was prepared consisting of 32 representative microscopes from the Billings Collection for showing as a Bicentennial feature at the National Library of Medicine. Also prepared were 10 new exhibits for the AFIP lobby, and 9 special window displays throughout the building.

Since the Yakovlev Collection was opened to other than Institute investigators in late 1974, more than 200 professional individuals have taken advantage of the opportunity, 34 research projects were begun, and over 1,150 photographs were made. The Otis Historical Archives and the Billings Microscope Collection also received attention from investigators seeking research material, bibliographies, reprints and photographs.

The Technical Services Division laboratory personnel continued to produce new wet mounts, plastic embedments, and refurbished pathologic specimens. They also provided macropathology training as resources permitted.

Annual Report 1976

ARMED FORCES MEDICAL MUSEUM

The Medical Museum staff researched and responded to 120 significant research requests during the year. Approximately 50 serious scholars visited the Museum to examine objects, peruse archival materials, acquire reprints and bibliographies, and take photographs. Many of these visitors also toured the Billings Microscope Collection and Museum storage area.

The Museum Laboratory processed 807 specimens and conducted 140 hours of special training in macropathology techniques. Colonel Charles C. Berdjis, MC, USA, Chief, Division of Experimental Research, Department of Genitourinary Pathology spent approximately 400 hours working with the Museum staff to reorganize, catalogue and properly diagnose 4,000 gross pathology specimens.

The Yakoviev Collection was visited by 166 individuals, and 39 investigators utilized this comprehensive collection of normal and pathological brain slides. In June, Dr. Paul I. Yakoviev donated his library, consisting of 2,500 medical, neuroanatomy, and neuropathology volumes, which is an integral part of this Collection.

The Collections Management Office accessioned 197 new acquisitions and processed 25 loans. Approximately 5,000 items from the stamp, uniform, document, and instrument collectiona were inventoried. Two distinctive collections received this year were a priceless group of 140 X-ray tubes donated by Dr. William H. Shehadi, Greenwich, Connecticut, and a collection of 149 gross pathology specimens donated by Dr. Eunice S. G. Waters, imola, California.

The Otis Historical Archives received and catalogued 895 books, journals, publications, and original research materials. The most significant contribution was a collection of research material from Dr. Norman W. Elton, Sun City, Arizona on the yellow fever "wave" of 1948-49.

In October Chauncey G. Biy, M.D., Associate Director for the Medical Museum resigned to accept a position with the National Cancer Institute; a new Museum Director has not yet been selected. Meanwhile, Dr. Lent C. Johnson, Chairman, Department of Orthopedic Pathology, AFIP, is furnishing content material for the portion of the Museum which is being redesigned for the 21 May 1978 reopening. The structural design has been completed and approved, and many construction and elevation drawings have been completed. When the Museum reopens, exhibits in the redesigned area will focus on the evolution of disease as it corresponds to the evolution of man and his changing environments, economies, and energy systems.



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ARMED FORCES MEDICAL MUSEUM

During the year the staff responded to approximately 110 significant research requests. Approximately 65 scholars visited the Museum to examine objects, peruse archival materials, acquire reprints and bibliographies, and take photographs. Many also toured the Billings Microscope Collection and Museum storage areas.



The Museum Laboratory processed 620 specimens and conducted 27 hours of special training in macropathology techniques. In October the Museum established a continuous lending program with the Uniformed Services University of the Health Sciences. The Museum agreed to furnish the medical school with gross specimens to be used as teaching aids in conjunction with enatomy courses. Since the program began 159 specimens have been loaned to the University.

The Yakovlev Collection was visited by 162 individuals and 34 investigators utilized this comprehensive collection of normal and pathological brain slides. One of the most notable research projects undertaken in the Collection this year was a study conducted by Professor H. J. Kretschmann and four assistants from Hanover, West Germany. Utilizing electronic equipment, Professor Kretschmann and his assistants conducted a planimetric quantitative study of regional development of the human brain and its component structures. Professor Kretschmann plans to return in 1978 to expand his study. In November the Yekovlev Collection was transferred to the Department of Neuropathology, AFIP for administrative accountability.

The Collections Manegement Office accessioned 184 new acquisitions and processed 20 loans. Approximately 5,000 items from the instrument, pharmaceutical, armament, microscope, and microtome collections were inventoried. Three distinctive electron microscopes were added to the Billings Microscope Collection during the year. They were an RCA-EMU-2A model donated by the Department of Epidemiology and Public Health, School of Medicine, Yale University, New Haven, CT.; an RCA-EMC-MI-12954 model donated by RCA Limited, Sydney, New South Wales, Australia; and a TRS-50-E1 model donated by Upjohn Company, Kalamazoo, MI.

The Otis Historical Archives received and catalogued 319 books, journals, publications, and original research materials. The most significant contribution of the year was a letter written by Walter Reed on 19 January 1872 while he was working at Brooklyn City Hospital. The letter was donated by Dr. Bennett M. Derby, New York, NY.

The position of Associate Director for the Medical Museum remained unfilled in 1977, and plans for reopening of the Museum in 1978 are in abeyance pending the refurbishing of Museum areas formerly occupied by the Uniformed Services University of the Health Sciences.

Manual Report 1978



ARMED FORCES MEDICAL MUSEUM

Edward R. White, M.D., J.D., Associate Director

The Museum was reopened on I September with appropriate ceremonies, and by December 639 individuals had availed themselves of the opportunity to view the numerous exhibits on medical history, contributions to medicine by the military services, medical instruments and devices, pathology specimens and current medical knowledge.

Edward R. White, M.D., J.D., formerly Chief of the Institute's Division of Legal Medicine, was appointed Associate Director for the Museum in February.

The highlight of the year was the formal reopening of the Museum which followed a 264-hour effort of enlisted military personnel of the Institute to refurbish, set up and reassemble the exhibits in time for the reopening. Since the reopening, the public has visited the Museum seven days a week and their response has been gratifying to the Museum staff. The ceremonies were presided over by the Institute's Director, Captain Elgin C. Cowart, Jr., MC, U.S. Navy. Among those present were Colonel James E. Ash, USA (Ret.), Curator of the Museum from 1929 to 1931 and 1937 to 1946, and the First Director of the Army Institute of Pathology in 1946. Also present were former Directors of the Institute, MG Joe M. Blumberg, MC, USA (Ret.), Captain Bruce H. Smith, MC, USN (Ret.), and Colonel Frank M. Townsend, USAF, MC (Ret.).

The Museum staff continued service to researchers, training of professionals, and an in-depth evaluation of Museum holdings. Significant achievements were the receipt of 663 new specimens, artifacts, books and journals; 21,478 items researched, inventoried and catalogued; 133 scholars aided or trained as professionals; 49 special services and tours for professionals; 442 specimens and artifacts loaned; and 172 research responses made to scholars.

Professional organizations served by loans and research included Gorgas Memorial Institute; the Center for Military History; Alexandria Bicentennial; Office of the Surgeon General, DA; the Smithsonian Institution; Mutter Museum of Philadelphia; Military Museum of the West; Fort McHenry Museum; Baltimore City Library; Walter Reed Army Medical Center and the Uniformed Services University of the Health Sciences.

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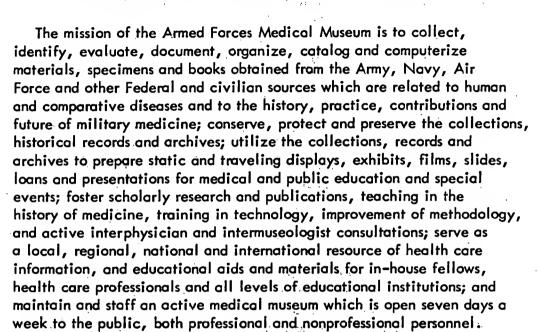
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ARMED FORCES MEDICAL MUSEUM

Edward R. White, M.D., J.D., Associate Director



The Museum provides instructional research and consultation services in the effects of disease, trauma and aging upon man and animal, the histories of disease, the history of military medicine, the history of medicine, men of medicine and science to U.S. government military and civilian units and agencies, national and international academic institutions, professional and public units and individuals. The Museum staff provides consultative services in natural sciences, medical sciences and the history of medicine. These services include research, requests, advice on audio-visual material and displays, preservation and study of pathology specimens, and current methods of medical education. Units served included the Departments of Army, Navy and Air Force; the military surgeons general; the Departments of Justice, Agriculture and Health, Education, and Welfare; Center of Military History, Veterans Administration, Adjutant General, the Congress of the United States and 580 other Federal, state and local governments and private. institutions. Mail/phone inquiries prompted 1,338 research efforts. More extensive efforts were required in 288 projects.

The Museum also provided overall supervision and direction for technology training programs on an individual request basis through the divisions of the Museum. The staff provided guidance and ensured adequate facilities for the programs and seminars of the Center for





Advanced Medical Education, AFIP; the utilization of the various collections of specimens of disease artifacts by institutions and individuals; and tours, seminars and current health care information lectures to professional and public institutions, groups, and individuals. The staff also provided guidance and support for civilians and military participating in Museum fellowships in health care and history of medicine.

The staff of the Museum acted as custodian and advisor for numerous collections of historical documents as well as normal and abnormal human and animal tissue utilized by the departments of the AFIP, national and international institutions and individuals. The staff maintained, administered and supplemented these collections by current knowledge new specimens and research techniques along with the acquisition of collections and material whose preservation would otherwise be impossible.

The Museum staff activated the following collections for research scientists: Orthopedic Pathology Tumor Collection. Inventory and filing of gross pathology slides and gross specimens in association with the Department of Orthopedic Pathology at AFIP; Arthur John Vorwald Collection of Pulmonary Diseases, 16 tons of material, 20,000 items, 90% completed; completed research files of personal papers of military and civilian medical science notables. This was formerly Registry of Noteworthy Pathology; William H. Shehadi Collection of X-ray tubes and equipment; Yakovlev Collection of the gross pathology of the mammalian brain; and the Smetana Hemorrhagic Fever studies.

The Otis Archives of the Museum assumed a predominant place for those interested in historical documentation of diseases, progress of medical education and treatment as well as notables in medicine. In quiet library atmosphere old books, papers, personal information and many historical artifacts including paintings and photographs were available to researchers.

The public viewing area of the Museum was open 360 days, 6 hours daily including weekends. The staff of the Museum developed a comprehensive health care current events program utilizing educational films, lectures, chiefly by the Museum's Associate Director, featuring discussion sessions on selected topics. For college, high school, and elementary school there were 148 tours with 6, 193 persons attending, 139 films shown, and 114 lectures given. For professional groups and individuals there were 134 tours, 625 persons attending, 27 films shown, and 67 lectures given.

The use of the Museum's multiple assets increased in 1979 at a geometric rate. By history and position, the Museum has assumed a commanding position in health care science, particularly in the medical profession. The Museum's resources will continue to be developed and utilized by all levels of health care education professionals. Elementary school students as well as specialized health care professionals use the Museum's resources for ongoing education and research.

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ARMED FORCES MEDICAL MUSEUM

Edward R. White, M.D., J.D., Associate Director

The mission of the Museum is to collect, identify, evaluate, document, organize, catalog and computerize materials, specimens and books obtained from the Army, Navy, Air Force and Federal and civilian sources which are related to human and comparative diseases and to the history, practice, contributions and future of military medicine; conserve, protect and preserve the collections, historical records and archives; utilize the collections, records and archives to prepare static and traveling displays, exhibits, films, slides, loans and presentations for medical and public education and special events; foster scholarly research and publications, teaching in the history of medicine, training in technology, improvement of methodology, and active interphysician and intermuseologist consultations; serve as a local, regional, national and international resource of health care information, and educational aids and materials for in-house fellows, health care professionals and all levels of educational institutions; and maintain and staff an active medical museum which is open 7 days a week to the public, both professional and nonprofessional personnel.

The Museum provided instructional research and consultation services in the effects of disease, trauma and aging upon man and animal, the histories of disease, the history of military medicine, the history of medicine, men of medicine and science to U.S. Government military and civilian units and agencies, national and international academic institutions, professional and public units and individuals. The Museum staff provided consultative services in natural sciences, medical sciences and the history of medicine. These services included research, requests, advice on audio-visual material and displays, preservation and study of pathology specimens, and current methods of medical education. Units served include the Departments of Army, Navy and Air Force, the Surgeons General, the Departments of Justice, Agriculture and Health and Human Services, the U.S. Army Center of Military History, Veterans Administration, Adjutant General, the Congress of the United States and 757 other Federal, state and local governments and private institutions. Mail/phone inquiries prompted research efforts totaling 1,992. More extensive efforts were required on 518 projects; 1,299 professionals were directly served by consultation.

The Museum provided overall supervision and direction for technology training programs on an individual request basis. The staff also provided guidance and ensured adequate facilities for the programs and seminars of the Center for Advance Medical Education, AFIP; the utilization of the various collections of specimens of disease artifacts by institutions and individuals; tours, seminars and current health care information lectures to

professional and public institutions, groups, and individuals. The staff also provided guidance and support for civilians and military participating in Museum fellowships in health care and the history of medicine.

The staff of the Museum acted as custodian and advisor for numerous collections of historical documents as well as normal and abnormal human and animal tissue utilized by the departments of the AFIP, national and international institutions and individuals. The staff maintained, administered and supplemented these collections by current knowledge, new specimens and research techniques along with the acquisition of collections and material whose preservation would otherwise be impossible.

The Museum staff activated the following collections for research scientists: Orthopedic pathology tumor collection. Inventory and filing of gross pathology slides and gross specimens in association with the Department of Orthopedic Pathology at AFIP; Arthur John Vorwald collection of pulmonary diseases, 1,500 private cases of industrial inhalant exposure and 1,000 animal experiments; research historical files of personal papers of military and civilian medical science notables; Woodward's pioneer photomicroscope collection; the Yakovlev collection of gross anatomy and pathology of the mammalian brain, 900 cases, 3,000,000 individual tissue cuts, 300,000 stained sections; and the Smetana hemorrhagic fever studies (Korea), tissue slides and electron microscope studies.

The Otis Archives offered a rich source for those interested in historical documentation of diseases, progress of medical education and treatment as well as notables in medicine. In a quiet library atmosphere researchers found old books, papers, personal information and many historical artifacts including paintings and photographs.

The public viewing area of the Museum was open 360 days, 6 hours daily including weekends. The staff of the Museum developed a comprehensive health care current events program utilizing educational films and lectures featuring discussion sessions on selected topics. The secretary for the Museum scheduled and arranged topics and health care audio-visual aids with the responsible unit of the academic group. Included in the program were college, high school, elementary schools, 139 tours, 6,335 persons attending, 131 films shown, and 125 lectures given, and professional groups and individuals 122 tours, 1,631 persons attending, 47 films shown, and 54 lectures given.

In 1980 the use of the Museum's multiple assets increased at a geometric rate. By history and position, the Museum has assumed a commanding position in health care science and particularly in the medical profession.

The Museum resources will continue to be developed and to be utilized by all levels of health care educational professionals. Elementary school students as well as specialized health care professionals use the Museum resources for ongoing education and research. The Museum's professional position is supportive of AFIP and all other academic institutions in their use of audio-visual materials, artifacts and specimens from the collections.



Edward R. White, M.D., J.D., Associate Director

The current mission of the Armed Forces Medical Museum is to: (1) collect, identify, evaluate, document, organize, catalog and computerize materials, specimens and books obtained from the Army, Navy, Air Force and other federal and civilian sources which are related to human and comparative diseases and to the practice, contributions and future of military medicine; (2) conserve, protect and preserve the collections, historical records and archives; (3) utilize the collections, records and archives to prepare static and traveling displays, exhibits, films, slides, loans and presentations for medical and public education and special events; (4) foster scholarly research and publications, teaching in the history of medicine, training in technology, improvement of methodology, and active interphysician and inter-museologist consultations; (5) serve as local, regional, national and international resource of health care information, and educational aids and materials for in-house fellows, health care professionals and all levels of educational institutions; and (6) maintain and staff an active medical museum which is open seven days a week to the public, both professional and non-professional personnel.

The Museum provides instructional research and consultation services in the effects of disease, trauma and aging upon man and animal, the histories of disease, the history of military medicine, the history of medicine, men of medicine and science to U.S. government military and civilian units and agencies, national and international academic institutions, professional and public units and individuals. The museum staff provides consultative services in natural sciences, medical sciences and the history of medicine. These services include research, requests, advice on audio-visual material and preservation and study of pathology specimens, and current methods of medical education. Units served included the Departments of Army, Navy, and Air Force; the several Surgeon Generals; the Departments of State, Justice, Commerce, Agriculture and Health and Human Services; Center of Military History, Veterans Administration, Adjutant General, the several members of congress of the United States and 817 other Federal, and Local governments and private institutions. Mail/phone inquiries prompted research efforts totaling 2,105. More extensive efforts were required in 905 projects. 1,642 professionals were directly served by consultation.

The Museum also provides overall supervision and direction for



ADP capabilities. Major resources were committed to the implementation of the Pathology Case Management System.

PATHOLOGY CASE MANAGEMENT SYSTEM (PACAMS) - This on-line system is designed to provide 24-hour accessioning for all consultations, improve management of case materials, and improve management information available on case status. The system was implemented in March 1981 on a Hewlett-Packard 3000 Series III The turnkey contractor of the PACAMS 1s System Computer. Automation Corporation of Silver Spring, MD. PSID support to the implementation consisted of data base conversion, system testing, user training, contract of changes and enhancements have been made to the system. The system now serves over 40 interactive users. Plans for 1982 include improvement in the thruput and response time, better case location tracking, improved consultation, improved search strategies, improved data collection methods (light pens) integration with present work processing equipment, better backup facilities (dual processors) and improved managment information support.

ADP SUPPORT - The Over Forty Cardiovascular Screening Program (required by AR 40-501) was implemented in June 1981 on the Hewlett-Packard System 3000. Other systems are being redesigned and programmed for interactive use on the HP as resources permit. In early 1981 the UCLA Biomedical Statistical Program (BMDP) was acquired for the Hewlett-Packard 3000 Computer. Use of this improved interactive package greatly reduced product turnaround time for AFIP research staff.

Plans were also initiated for replacement of an Interdata 70 CPU with a new mini-computer in the Cytology Department to aid in image processing.

TIME-SHARING SERVICES - The MEDLARS/MEDLINE computerized Literature Retrieval Service was obtained for the use of the ASH library research; WESTLAW computerized Medical/Legal Information Retrieval System was obtained for the Department of Legal Medicine Function; and a time-sharing service to Ft. Detrick is now utilized for the Army Medical Department Property Accounting System (AMEDDPAS).

COMMUNICATION SYSTEM - Aided by the 7th Signal Command, plans for an improved communications system employing Army Base Information Transfer System (ARBITS) technology are well along the way to implementation. Expected installation date is early to mid FY 82. When completed, the new cable system will allow the integration of the Institute's word and data processing assets.



technology training program on an individual request basis through the several divisions of the Museum. The staff provides guidance and ensures adequate facilities for the programs and seminars of the Center for Advanced Medical Education (AFIP); the utilization of the various collections of specimens of disease artifacts by institutions and individuals; tours, seminars and current health care information lectures to professional and public institutions, groups, and individuals. The staff also provides guidance and support for civilians and military participating in Museum Fellowships in Health Care and History of Medicine.

The staff of the Medical Museum acts as a custodian and advisor for numerous collections of historical documents as well as normal and abnormal human and animal tissue utilized by the Department of the AFIP, national and international institutions individuals. The staff maintains, administrates supplements these collections by current knowledge, specimens and research techniques along with the acquisition of collections and material whose preservation would otherwise be The following collections of tissue and cases are available to research scientists upon application to the Director, AFIP:

- a. Orthopedic Pathology Tumor Collection. Inventory and filing of microscopic and gross pathology slides and gross specimens in association with the Department of Orthopedic Pathology at AFIP (Primarily bone neoplasms).
- b. Arthur John Vorwald Collection of Pulmonary Disease (1,800 private cases of industrial inhalent exposure and 1,200 animal experiments.
- c. Research historical files of personal papers of military and civilian medical science notables (The Hall of Fame of Military and American Medicine).
- d. Woodward's Pioneer Collection of Microscopic Glass Tissue Slides.
- e. Yakovlev Collection of the gross anatomy and pathology of the mammalian brain (1,000 cases, 300,000 stained sections).
- f. Smetana Hemorrhagic Fever studies (Korea) (Tissue slides and electron microscope studies).



- g. The Medical Numismatics Collection comprising 2,369 irreplaceable medals, coins, and medallions on famous medical subjects and persons, some dating to the Roman empire.
- h. The H. Haskel Ziperman Collection of Forensic Science Case Studies and Military Medical Achievement.
- i. The Civil War Collection of 5,000 Traumstic and Infectious Bone Pathology Specimens.
- j. The Fred D. Maurer Collection of 1,875 2x2 tesching slides of diseases of domestic animals.

The Museum's comprehensive loan program of specimens, artifacts, charts, films, and models aided 61 educational schools and institutions with nearly 500 individual items.

Otis Archives continues to support research for those interested in military medicine, historical documentation of diseases, the progress of medical education and treatment as well as notables in medicine. In a beautiful quiet library atmosphere, researchers can find old books, papers, personal information and many historical artifacts, including paintings and photographs.

The public viewing area of the Museum was open 360 days, 6 hours daily including weekends. The staff of the Armed Forces Medical Museum developed a comprehensive health care current events program utilizing educational films and lectures (chiefly by the Associate Director) featuring discussion sessions on selected topics. The Secretary of the Museum scheduled and arranged topics and health care audio-visual aids after consultation (by phone on in person) with the responsible unit of the academic group.

- a. College, high school, elementary school: 205 tours, 8,686 persons served, 228 films shown, and 169 lectures given.
- b. Professional groups and individuals: 87 tours, 1,482 persons served, 31 films shown, and 58 lectures given.

In summary, during 1981 the use of the Museum's multiple assets again increased at a geometric rate. By history and position, the museum has assumed a commanding position in health care science and particularly in the medical profession. The museum resources will continue to be developed and to be utilized by all levels of health care professionals. Elementary school students as well as specialized health care professionals use the museum resources for ongoing education and research.



The Museum's professional position should be one supportive to the AFIP and other academic institutions in their use of audio-visual materials, artifacts and specimens from the collections.

Additionally, the staff facilities of the Museum allow active research groupings of valuable teaching and research material (primarily pathology oriented). The transfer of these often irreplaceable case collections to the AFIP Medical Museum has allowed cost-effective research and associated use while preserving the information and material for future reference.

Edward R. White, M.D., J.D., Associate Director

CONSULTATION - There were 4,524 requests from persons requesting specific information on the Armed Forces Medical Museum holdings, either by telephone, in writing or by personal visit.

EDUCATION - The Education Program includes the Tour and Loan Programs. There were 293 groups which made prearranged visits to the Armed Forces Medical Museum, 75 of which were military. There wre 1,126 items loaned from the Armed Forces Medical Museum holdings.

RESEARCH - The primary research effort in 1982 was to completely categorize, inventory and document the Armed Forces Medical Museum holdings. There were 113,116 items processed, in addition to the refurbishing of 724 specimens. Dr. Gunther von Hagens of the Institute of Anatomy at the University of Heidelberg in Germany granted the Museum permission to use the Plastination method of preservation of pathology specimes. Museum personnal have attended training seminars and will begin this advanced method in 1983.

PUBLICATIONS - No publications were completed in 1982; however, in process are 26 brochures to more cleary document and explain significant public museum exhibits, and the Macropathology Manual in the process of publication.

ADMINISTRATIVE CHANGES - A complete reorganization was devised, planned and implemented to increase efficiency and effectiveness in service to the public, resulting in an overall decrease in nearly 50% of the unit cost of services performed, and an overall increase in productivity of an estimated 79%.

OTHER ACTIVITIES - There were 511 items added to the Museum holdings. The Museum staff actively supported the CAME and ARP graduate education programs.

Frank B. Johnson, M.D. Acting Associate Director

CONSULTATION - There were 1,307 requests from persons seeking specific information on the Armed Forces Medical Museum or its Collections, either by telephone, by personal visit or in writing.

EDUCATION - The Education mission includes the Tour and Loan programs. There were 254 groups with a total of 10,331 persons who made prearranged tours of the Armed Forces Medical Museum. There were 259 films shown, 62 tours given "Behind The Scenes" and 125 Lectures given to these groups, of which 48 were military. A total of 1,067 individual items were loaned from the Museum to 92 medical professionals, museums, schools, etc. Of these loans, 56 were made to military organizations.

RESEARCH - The primary effort throughout the year was the continued Inventory and documentation of all collections of the Armed Forces Medical Museum. There were 2,498 items processed, 532 specimens refurbished, and the skeleton of the "Space Chimpanzee" HAM was processed with the cooperation of the Division of Veterinary Pathology. Delays in receiving equipment and supplies for the von Hagens' plastination preservation method, in addition to the departure of the senior Laboratory Specialist, postponed the implementation of the technique at the Museum. Full implementation of the von Hagens' process is anticipated in early 1984.

ADMINISTRATIVE CHANGES - Steven F. Binnall, LTJG, MSC, USNR departed his position of Administrator, Armed Forces Medical Museum, effective 1 April 1983 to assume a position at the Naval Regional Medical Center in Orlando, Florida. Edward R. White, M.D., J.D., resigned as Associate Director effective 15 October 1983. A search committee of museum professionals was constituted by The Director, AFIP to recommend a replacement. The committee spent the entire day of Friday, 14 October 1983 at the Museum, interviewing the staff and examining the exhibits, Archives and the collections' storage areas.

OTHER ACTIVITIES - There were 27 items added to the Museum's collections during the year, including an AEG-ZEISS Electron Microscope Type EM8. On 4 August 1983, three members of the Scientific Advisory Board toured and closely examined the Museum as part of the SAB Annual Meeting.

PUBLICATIONS - During 1983, 11 brochures which explain significant exhibits and topics of medical history were revised and reprinted. In addition, Dwight J. Schmidt, Chief of Anatomical Collections of the Museum, was second author of an article entitled "Determination of Sex with A Discriminant Analysis of New Pelvic Bone Measurements: Part I", In Journal of Forensic Sciences, 28(1):



Frank B. Johnson, M.D. Curator

CONSULTATION - There were 1.433 requests from persons seeking specific information on the Armed Forces Medical Museum or its Collections, either by telephone, by personal visit or in writing.

EDUCATION - The Education mission includes the Tour and Loan programs. Total visitation for the year was 26,064 persons. There were 264 groups with a total of 10,641 persons who made prearranged tours of the Armed Edwind The Scenes". 264 lectures presented and 118 guided tours given the Museum's Docents to these groups, of which 53 were military. A total of museums, medical professionals, schools, etc. Of these new loans, 22 (249 returned during the year and of these returns, 18 (398 items) were from military organizations.

RESEARCH - The primary effort throughout the year was the continued inventory and documentation of all collections of the Armed Forces Medical Museum. There were 8,253 items processed and 796 specimens returbished in the Otis Historical Archives, over 219 cubic feet of records were processed and over 90 cubic feet of new records were Approximately 122 pages of record descriptions and finding aids were added. Two illustrated lectures on the von Hagens' plastination technique (including Museum. The licensing necessary for use of this process was obtained and inventorial stages were implemented.

ADMINISTRATIVE CHANGES - Effective 1 January, by order of the Director, Dr. Frank B. Johnson was appointed Curator of the Museum due to the departure on 15 Oct 1983 of the previous Associate Director.

OTHER ACTIVITIES - There were 14 new accessions added to the Museum's collections during the year. In the Museum's Silliphant Hall of Current Events, 14 different exhibits were rotated in from SID, CMI. Working with ADP, Museum staff established data catalogues/codes for the skeletal, or scope collections. The Museum's Billings opening of the special exhibit, "Exploring Microspace", at the Smithsonian's Autional Museum of Natural History. The exhibit ran until July and featured which were valued at \$1,200,700.00. Dwight J. Schmidt, Chief of Technical of Physical Anthropology, presented a research paper on colony-of tamarins with spontaneously occuring. Colonic adenocarcinoma entitled: Development of The Femur In Saguinus fusciollis and Saguinus oedipus oedipus

Frank B. Johnson, M.D. Acting Curator

CONSULTATION – There were 776 requests from persons seeking specific information on the Armed Forces Medical Museum or its collections, either by telephone, by personal visit, or in writing. Of these requests, 41 involved consultation on the care of collections. In addition, numerous photographs and x-rays were provided to scholars planning to publish the results of their research.

EDUCATION - The education mission includes the tour and loan programs. Total visitation for the year was 35,272 persons, an increase of 35 percent over the previous year. There were 300 groups, with a total of 10,942 persons who visited the Museum on specially arranged tours. There were 203 films shown, 342 individuals given tours "Behind The Scenes," 147 iectures presented, and 153 guided tours given by the Museum's docents to these groups, 46 of which were military. A total of 46 new loans (525 items) were made from the Museum's collections to museums, medical professionals, schools, etc.; 80 percent of these loans were from the anatomical and organizations. There were 43 loans (614 Items) returned during the year; 22 (231 items) of these returns were from military organizations.

ADMINISTRATIVE CHANGES - Effective 18 November, by order of the Director, a reorganization of the Museum was implemented which separated the Museum into two divisions: the Anatomical and Pathological Collections and Exhibits and the Historical Collections and Education. Each division is the responsibility of an appropriate curator. Under this reorganization, the chief administrative position of the Museum is designated Associate Director of the Armed Forces institute of Pathology for the Armed Forces Medical Museum. On 15 July, Adrianne Noe joined the staff of the Museum as Chief of Technical Services and now serves as the Curator of Anatomical and Pathological Collections and Exhibits.

MAJOR ACTIVITIES - Six new exhibits were planned and installed at the Armed Forces Medical Museum, including three on Civil War medicine, one on lung disease, and one celebrating the contributions of James Earle Ash. The Museum's iron lung was restored to working order for demonstration purposes. in addition, the Museum constructed exhibits for the Surgeon General's Office and for the Surgeon General's Library at the Pentagon. In the Otis. Historical Archives, over 234 cubic feet of records were processed and over 280 cubic feet of new records were added. Active efforts to identify Armed Forces institute of Pathology holdings suitable for inclusion in the Archives netted an additional 320 cubic feet of photographs, glass negatives, paintings, and medical lilustrations. During the course of the year, the Museum received from Dr. M. Catherine Blumberg an extensive donation of the artifacts. photographs, and papers relating to the medical career of her late husband, Major General Joe M. Blumberg. Another significant acquisition was a collection of 152 specimens, plus numerous other artifacts, from the Norristown State Hospital, Norristown, Pennsylvania. numerous plastinated specimens, gifts of Dr. Gunther von Hagens, following his visit and lectures in October: A major effort is underway to install collections in state-of-the-art museum storage units which arrived in July. Work is ongoing in the computerization of the Museum's collections and the rewriting of the Billings Microscope Collection catalogue. The Museum's laboratory staff prepared, refurbished, and inventoried 774 anatomical specimens. This and

other tasks were accomplished with the assistance of five student aides, whose hours totalled 5,671.

OTHER ACTIVITIES - In May, the Museum was the site of the First Annual James Earle Ash Lecture hosted by the Armed Forces Institute of Pathology and the American Registry of Pathology. An outstanding event of the summer was the installation on 7 June of the plaque rededicating the Museum and its collection as a National Historic Landmark. Museum staff members attended meetings of the American Association for the History of Medicine, the Army Museum Conference and Smithsonian institution Workshops on museum security and computerization of collections. In July at the National Archives, Adrianne Noe, gave a talk on aviation medicine in World War II as part of the National Archives' military history series and in August presented a lecture on the history of medical technology at the historical session of the 1985 international Health Care Exposition in Washington, D.C.

Marc S. Micozzi, MD, Ph.D. Associate Director

ANATOMICAL COLLECTIONS

The major task of organization, preservation, and conservation of the dry skeletal collection neared its conclusion with the completion of the inventory, the installation of 1,102 specimens in sealed metal cases, and the inclusion of 2,069 inventory records in the computer data base. These arrangements provide security while affording researchers and staff better access to the collection.

This work has also enabled us to begin plans for the skeletal collection catalogue. Photographing representative specimens for the catalogue will begin in January.

Shelving units (20) for the gross anatomical collections were installed, and the wet collection of 5,000+ specimens were reorganized and stored on them.

investigations of bone casting techniques and methods were begun in order to provide teaching and research assistance using fragile and/or historically important material. Information was gathered from the Smithsonian institution's Exhibits Central and Paleobiology Departments, the Cleveland Museum of Natural History, and Dupilcast Corporation.

Gretchen Reimer, a student in the Science and Engineering Apprentice Program, produced a collation of 2,200 indian specimen acquisitions by the Museum and their disposal—invaluable information for the Medical Museum and the Smithsonian institution (which ultimately acquired a large part of this material).

The anatomical collections loan program was continued with the addition of on-site loan facility inspections (4) and the modification of existing loan policy.

The Sudden intant Death (SID) Collection was received and placed in storage pending the establishment of a working research program with NICHD.

information requests numbered 177, 11 researchers or research groups were accommodated, and numerous behind-the-scenes tours given.

A fleid trip to the Cleveland Museum of Natural History provided comparative information on the management and maintenance of a large skeletal collection.

HISTORICAL COLLECTIONS

STORAGE - Twenty-one Interior steel museum storage cabinets in the historical section of Hammond Hall in the Armed Forces Medical Museum have been rearranged in order to maximize the utilization of space in the area. The new configuration allows for a 43 percent increase in cabinet storage space and creates 144 square feet of storage space for large objects that had previously been scattered throughout the Museum and Hammond Hall.

Four hundred and forty square feet in storage space adjacent to Hammond Hall were made available to the Medical Museum in August. The space had been occupied by the Center for Advanced Medical Education. This space is now being used to store large portions of the museum collections as well as assorted objects, bringing together for the first time the Museum's collections. Secure museum-quality shelving Is on order to replace the temporary shelving that is currently in use. In addition, a new storage system is in preparation for the Billings Microscope Collection.

CLASSIFICATION OF ARTIFACTS - A system to classify the objects in the historical collection was developed during the fourth quarter of the year. This is a primary stage in organizing and managing this large collection of diverse objects in a manner to maximize its usefulness to the Museum, the AFIP, and the scholarly communities. The system, adapted from the classification system in use by the Dittrick Museum of Historical Medicine in Cleveland, Ohio, is based on the National Library of Medicine publication Medical Subject Headings. In it, artifacts are organized according to a system of primary and secondary function. Alan Hawk, Mmseum technician for the collection, Kelly Mathers, registrar, and Adrianne Noe, curator, travelled to the Dittrick Museum and met with staff members there to see this computer-base system in operation in December, when it was decided to adapt and begin implementing the Dittrick system.

Staff members of the Historical Collection have been active in forging and maintaining connections with the Smithsonian Institution, other museums, and the academic community. For example, on two highly valuable field trips, staff members travelled to the Milwaukee Public Museum, Milwaukee, Wisconsin, and to the Howard Dittrick Museum of Historical Medicine in Cleveland, Ohio, to observe museum practices and exchange ideas with other museum professionals. Adrianne Noe, curator, published a lengthy article and photographic essay, "Microscopy and the Army Medical Museum," in Caduceus and lectured at meetings of the Air Force Historical Foundation in Bethesda and the Joint Committee for Aviation Pathology in Halton, England. Consultations were provided to the National Air and Space Museum, the National Museum of American History, the National Library of Medicine, the Johns Hopkins School of Medicine and the Mutter Museum, College of Physicians of Philadelphia.

BLACKBURN COLLECTION

Technicians have been working with the Blackburn Laboratory Collections from St. Elizabeth's Hospital. For the larger neuropathological collection, demographic, pathologic, and other data is being recorded onto a catalog form to assist in computerization of the collection. A data base management system is also being devised so that the 15,000+ cases can be easily manipulated. An organizational system for the wet tissue, paraffin blocks, microscope slides, and records is being planned so that the collection can be used by researchers from NIMH, AFIP and elsewhere. In addition, important historical artifacts from this collection relating to the history of pathology were donated to the Museum.

OTIS HISTORICAL ARCHIVES:

CONSULTATION - There were 414 requests from persons seeking information on the collections reposited in the Museum's archives. These requests were categorized as follows:

76 written requests answered 192 telephone requests answered 115 visiting researchers assisted 31 AFIP staff requests (excluding museum personnel)

RESEARCH - The primary work effort during the year continued to be in the area of archival arrangement, description, and storage of a growing backlog of unprocessed materials. In the Otis Historical Archives, 206 cubic feet of records were processed and 339 cubic feet of new materials were added to the collections during the year. Subsequently, a deficit of 133 cubic feet of unprocessed materials was created as newly accessioned records surpassed processing. Continued active efforts to identify AFIP holdings suitable for inclusion in the Archives netted over 300 cubic feet of important historical photographs (including the 115,000 photos constituting the Reeve Collection), glass negatives, medical illustrations, paintings, and books. Our descriptive efforts, accomplished nearly 200 pages of preliminary survey, as well as 37 record group descriptions and finding aids. During the latter part of the year, the archivist assisted in a project in support of the National Institute of Occupational Safety and Health (NIOSH) Committee studying silicosis. On two occasions in the summer and fall, the Archives and AFMM hosted meetings of this distinguished group whose membership was on-site to study the extensive Vorwald Collection. Additionally, the Archives was involved in cooperative research projects for a number of various federal agencies, military organizations, and civilian groups, including the Surgeon General's Office, the National Library of Medicine, The Smithsonian Institution, WRAMC, The Military institute, and ASMEPPS. Again this year, the Archives assisted the Department of the Army and the Justice Department Asbestos Litigation Branch in accessing the Vorwald Collection and giving relative deposition.

EDUCATION - The education mission of the Archives includes the tour, loan and consultation programs (the latter having been totaled above). Total visitation for the year was 254 persons. A total of 108 individuals, (25 were military personnel), in addition to researchers, given tours of the archival holdings. A total of 69 items were loaned from the Archive's collections to museums, publishers, libraries, military organization branches, etc. during the year. Of these new loans, 25 items were loaned to military organizations. There were 13 items returned to the collections during the year from outstanding loans. Of the 268 research requests received during the year, six involved preservation consultation.

Other - There were six new accessions added to the Archives holdings and further additions to four existing record groups. The Archivist assisted the Army Surgeon General's Office in providing research and collections support to the planning of a 1987 Army commemoration of the first hundred years of the Hospital Corps. The Archive's Collections received important publicity in providing loans for exhibit by the National Library of Medicine (sesquicentennial), ASMEPPS, WRAMC Hospital, The Surgeon General's Office, the Corcoran Gallery of Art, Rice University, and the Metropolitan Museum of Art.

OFFICE OF THE REGISTRAR

The AFMM Loan Program consisted of 45 outgoing loan transactions initiated in 1986, involving 398 anatomical specimens, 91 historical objects, and 66 archival items. Nine of the total loan transactions were to military institutions and involved 55 items.

The total number of loaned items returned during 1986, including items loaned in previous years, was 353 anatomical specimens, 125 historical objects and 134 archival items.

The AFMM coordinated one incoming loan involving two historical objects for the purpose of a training film being produced by another AFIP department.

Since November 3, 1986, the Registrar's Office has produced a revised Agreement for Outgoing Loan along with redefined standards and procedures for the loan of items from AFMM collections. A statement addressing AFMM's position on appraisals was formulated and implemented as policy.

The Registrar's Office has been active with the issues of security and AFIP designated smoking areas in the context of how they effect the museum collections in storage and on exhibit. Meetings were held with the AFIP administration to address these issues.

Other projects involving the Registrar's Office include identifying future storage space needs for collections, reorganizing existing space to maximize efficiency and allocating space to accommodate incoming acquisitions including the Blackburn Collection and St. Elizabeth Items. Allocation of space was also made for the Sudden Infant Death Collection, which was moved to AFMM facilities in December 1986.

EXHIBITS

During 1986, the Exhibits Department, Armed Forces Medical Museum, obtained from the National Museum of American History, Smithsonian Institution, a number of significant pieces of equipment for the production and display of exhibits. Included are an arc-piate burner for the silk-screening process, a varityper for label making and 13 large wood and glass display cases. These cases were prepared for use by the Armed Forces Medical Museum in time for the Second Annual Ash Lecture, hosted by the Armed Forces Institute of Pathology and the Armed Forces Medical Museum in May. Fifteen exhibits were newly designed, refurbished, or upgraded during the year. One such exhibit, "The Old Red Brick," located in the lobby of the Medical Museum, displayed objects and photographs form the former home of the AFIP. Twenty-seven hours of volunteer help went into its construction. General design work was carried on throughout the Museum.

A number of objects were donated to the Museum, including one which was prepared for exhibition. The control unit and other portions of the first million-volt electron microscope used in this hemisphere were donated to the Museum and installed by staff members of United States Steel, Pittsburgh, Pennsylvania.

Exhibits staff visits to various Museums provided opportunities to view the exhibits and production facilities of museums in Washington and elsewhere. Exhibits assistance was given to various groups, including the National Institute for Neurological and Communicative Disorders and Stroke, and the National Library of Medicine.

A new exhibit policy was developed for use in the Medical Museum. It establishes general tasks and responsibilities for all phases of exhibit planning, production and publication.

A portion of Silliphant Exhibit Hall was redesigned as a staging area for exhibit preparation and installation, as a temporary, secure holding area for new acquisitions and in-processing.

PUBLIC EDUCATION OFFICE

For the first 10 months of 1986, the activities of the education program continued much as described in the annual report of 1985, and tour coordinators continued to offer tours. The following statistics were recorded for 1986:

Number of scheduled tours		226
Number of scheduled tour visitors		8,132
Number of walk-In visitors		20,505
Total number of visitors	8,8	28,637

In October 1986, the film program was discontinued to allow groups to use their learning time more effectively in the Museum (except for those groups to whom prior film commitments had been made). A new education coordinator joined the staff at the beginning of November and began to offer "highlights" tours of the Museum to the public and to monthly AFIP newcomer orientation groups.

Broad goals for the Education Office were initiated in 1986:

- 1. Creation of a number of learning intensive museum tours directed toward meeting specific needs and interests of museum visitors.
- 2. Introduction of Interactive concepts to help involve visitors in their own learning.
- 3. Recruitment of a volunteer corps to provide several types of services to the museum public.
 - a. docents (museum teacher-guides)
 - b. information desk volunteers
 - research volunteers who will prepare materials relating to museum exhibits and subject-related areas for distribution to the public.
- 4. Training and supervision of volunteer groups to perform in the above capacities.
- 5. Outreach efforts to learn how the museum can better serve the community. This was begun through the use of a questionnaire to determine visitor interests and concerns.
- 6. Implementation of a public/community relations program.
- 7. Education Office input into both short-term and iong-term goals for the exhibits program.
- 8. Creation of a resource library for use by volunteers.

BLUE-RIBBON PANEL ON THE MUSEUM

An ad hoc "blue-ribbon" panel to study the feasibility of a private support organization for the museum was recruited. Membership includes the Under Secretary of Health and Human Services (Chair), the Surgeon General of the United States, the Medical Director to the U.S. Congress, the dean of the Uniformed Services University of the Health Sciences, and the assistant secretary of the Smithsonian Institution.

A proposal for professional assessment and accreditation of AFMM was prepared for review by the Director and the Board of Governors.

PUBLIC RELATIONS

Media interviews and/or support were provided to PBS, WGBH, OMNI Magazine, CBS News, Innovations, National Geographic, USAF Project Warrior, the Washington Post, the New York Times and Robert J. Garrick (media consuitant). A tracking system was initiated to support public relations efforts in the community. Support was provided to U.S. congressional offices.

TEACHING - Contacts with the Armed Forces Institute of Pathology WRAMC, USUHS, the Maryland Anatomical Board, and the Maryland Medical Examiner were initiated to pursue the creation of new anatomical and pathological teaching collections using state-of-the-art tissue plastination techniques. Loans were arranged for USUHS and Georgetown University in support of professional education.

RESEARCH - Two collaborative research proposals and one independent research proposal were approved by the AFIP Research Committee and intiated by AFMM. Numerous collaborative efforts were undertaken with NiH, USDA, Cornell University, the Chinese Academy of Medical Sciences (Beijing), the National Library of Medicine and the National Air and Space Museum. Six academic articles were published by the museum staff in 1986, showing affiliation with AFMM, AFIP.

CONSULTATION - Two consultations were provided to the AFIP Division of Forensic Pathology.

ADMINISTRATIVE

RECRUITMENT - New job descriptions were written and classified for the following positions:

Curator of Anatomical Collection and Education Curator of Historical Collections and Exhibits Public Education Co-Coordinator Registrar

New Job descriptions were initiated for:

Chief Archivist
Exhibits/Visual Information Specialist

Recruitment was completed for the following positions:

Registrar
Museum Technician, Historical Collections
Museum Technicians, Anatomical Collections (2)
Secretary
Public Education Coordinator
Community Relations Specialist

Requests for a temporary exhibits specialist and a temporary clerk-typist were generated.

Recruitment was initiated for a curator of Anatomical Collections and Education.

Comprehensive policies and procedures were generated reguarding:

Administrative provisions

Appraisals Appointment of adjunct curators Anatomical collections management Archives operations Area managers' meeting and space utilization plan Blackburn Neuropathology Collection **Billings Microscope Collection** Catalogue publication plans Exhibit production Film program Loans to Uniformed Services University of the Health Sciences Monthly newcomers' briefing Press relations Personnei policies Parking policy Physical security Student intern (stay-in-school) program Tour co-coordination Volunteer program

Position statements were generated for the AFIP Organizational Effectiveness Committee and College of American Pathologists regarding museum organization and relationships between the AFIP and the Medical Museum.

OFFICE OF THE ASSOCIATE DIRECTOR, AFIP, FOR THE ARMED FORCES MEDICAL MUSEUM

Administrative - New position descriptions were written and upgraded for the following positions:

Curator of Anatomical Collections; Museum Technician, Anatomical Collections; Curator of Historical Collections; Museum Technician, Historical Collections; Museum Programs Officer, Registrar, Museum Staff Assistant; Museum Clerk-Typist; Chief Archivist, Exhibits/Visual Information Specialist.

Recruitment was completed for Curator, Anatomical Collections, and Museum Clerk-Typist. Requests for temporary Exhibits Specialists were generated in support of a comprehensive, state-of-the-art AIDS public health education exhibit.

Periodic patrols of the Medical Museum by uniformed police were obtained by arrangement with the Provost Marshal, Walter Reed Army Medical Center. Numerous directional signs were installed throughout the WRAMC post to direct visitors to the Medical Museum entrance.

Position statements were generated for the "Blue-Ribbon" Panel on the Medical Museum regarding the national role of the Medical Museum, the public and professional clientele served, and physical location, accessibility and visibility.

A Medical Museum Registry was opened in the American Registry of Pathology to support museum programs. A proposal for professional assessment and accreditation by the American Association of Museums was approved by the Director and the Board of Governors.

Public relations efforts with the media continued as in 1986. Emphasis was given to the creation of a full-time Public Affairs Specialist in the Institute to serve AFIP and the Medical Museum. Highly favorable public information articles appeared for the first time in the Washington Post, the Washington Times, the Los Angeles Times, and several regional newspapers.

Education - In support of medical education, a collections acquisition category was created primarily to accession anatomical and pathological specimens for hands-on teaching of medical students, residents,

course attendees, volunteer and visitors, witho jeopardizing unique or historic museum collections. this end, a comprehensive tissue specimen review procedules was established in cooperation with AFIP Research and Repository Division for all deaccessioned case materials from AFIP Tissue Repository. In addition, a regular program was established to obtain recent autopsy specimens from the Walter Reed Hospital Autopsy Section.

A comprehensive on-site teaching exhibit was conceived, designed, and installed at the Uniformed Services University of the Health Sciences, Bethesda second-year pathology course, required for all medical In coordination with the Office of the Assistant students. Secretary Defense, of Health Affairs, planning was initiated for the production of an effective public information brochure on the purposes of the autopsy. Planning was completed for the first AFIP continuing medical education course in Forensic Anthropology to be held February 1988 in the Medical Museum.

Research - Staff from various divisions of the museum actively participated as an inter-disciplinary team in all phases of the excavation and on-site analysis of human skeletal remains from a War of 1812 U.S. battlefield cemetery in Ft. Erie, Ontario, Canada. A major research collection of pubic bones for application of osteologic techniques for aging the human skeleton was transferred to the medical museum in support of approved research A collaborative cancer research project was projects. initiated. in the People's Republic of China. comprehensive article on "Transporting the Wounded: The Transportation Models of the Armed Forces Medical Museum" was prepared for publication in Caduceus. In addition, six major research articles were published in the scientific literature by museum staff, and numerous presentations were at local and national professional meetings in anthropology, epidemiology, history, and pathology.

OFFICE OF THE REGISTRAR

During its first full-year of existence, the Office of the Registrar completed the major task of establishing overall procedures and corresponding forms for processing and registering museum collection items. Part of the undertaking involved developing a registration system who accommodated many former systems generated over the 122 years of the museum's existence. The new system was planned not only to meet the past and current collections management needs of the museum but to recognize future needs with emphasis on automation. On 20 May 1987

the Armed Forces Medical Museum Accessions Committee was appointed with the Registrar as chairperson. The purpose of this committee was to establish a decision-making body to review organized presentations concerning collections management policies, new acquisitions, and deaccessions of collection items. The committee's concerns extend to adhering to legal requirements and maintaining physical control and accountability for the museum's collections.

Procedures for reconciling and preserving collection records were established this year. This project is a multi-year effort involving thousands of person-hours. end results will be the preservation of original "working file" documents, creating duplicates, and system for establishing a cross-reference accurate retrieval of standard levels of collection information. These methods of information control are all directly how the collections can be accessed for to exhibition, and other educational purposes. research, Additional full-time support staff to assist the one currently designated for the Office of position Registrar are required to make significant progress with this time-consuming project.

The Outgoing Loan Program ran very smoothly this year can be attributed to the new policies established in November 1986. The Office of the Registrar negotiated, approved, and logistically coordinated twenty-one loans involving 32 anatomical specimens, 86 historical objects, archival documents, and 9 pieces of exhibit equipment. Loaned items from the collections were featured in exhibits DOA, Office, Surgeon General's Smithsonian Institution, National Library of Medicine, the Museum of the City of New York, Staten Island Institute of Arts and Sciences, and several other local and regional institutions. In addition, 89 anatomical specimens, 126 historical objects, 44 archival documents, and 12 pieces of exhibit equipment were returned from loan and processed according to established quidelines. Renegotiations were made for several loaned items to include them under current loan standards. Included in these transactions are museum items currently on exhibit at the National Gallery of Art and the Pentagon.

The Office of the Registrar continued its involvement in obtaining more secure storage space to accommodate new acquisitions, improve inadequate storage arrangements, and increase the space efficiency of items currently stored in the museum's holdings. Continual emphasis was made that museum storage must meet criteria for safety and security

while maintaining an environment that increases the museum's ability to fulfill its responsibility to preserve collections. The Office of the Registrar negotiated with internal and external reviewing bodies for a full-time museum conservator and facilities to accommodate this position. Reports from these reviews recognize the importance for a conservator in order for the museum to adequately care for its collections according to its founding mandates.

ANATOMICAL COLLECTIONS

The major task of organization, archival research and inventory of the dry skeleton collection was essentially completed, with the installation of 2,844 specimens in sealed metal cases and the inclusion of 2,844 inventory records in the computer data base. These arrangements provide security while affording researchers and staff better access to the collection. Work remains on approximately 100 problem bone cases, which involve laboratensive research in the archives in order to track documentation.

Conservation remains a problem for much of the collection. Most of the dry bone material is fragile. These surfaces need treatment with polyvinyl acetate to prevent loss of small pieces of bone. Many specimens need gluing, such as the masticatory apparatuses.

Completion of the dry bone inventory has enabled us to begin plans for the skeletal collection catalogue and teaching slide collection, as well as the creation or revision of several osteological exhibits in the public areas and in AFIP: Skeletal Growth and Development, LaGarde Gunshot Fractures, Survival from Trauma, Interior Structure of Bone, and the design phase of an Osteopathology exhibit. In addition, two other exhibits were installed which crossed divisions: Facial Reconstruction and Preservation of the Body.

Inventories of wet tissue files and reorganization were initiated. During this process identification of an "A-series collection" of 90 plastic-embedded blocks of gross tissue resulted in finding the source: Napa State Hospital, California. This material was cleaned and assigned museum catalogue numbers; and files were created In 1987 the wet laboratory in G-035C was returned to the museum. Reorganization of supplies and equipment between the exhibits preparation area (G-035B) and the wet lab took place.

The Anatomy Division refurbished over 200 specimens in preparation for the Ash Lecture and over 66 specimens for a teaching exhibit for USUHS.

Conservation remains a significant problem for much of the wet tissue collection. Many specimens need to be refurbished with preservative solution, jars resealed, and specimens rebagged or remounted. An inventory of the wet specimen collection remains to be done.

Anatomical collections acquired 35 skeletal forensic cases from AFIP, a study embryology slide collection from NICHD, 34 specimens from the Museum of Ophthalmology, San Francisco, 150 wet tissue specimens from Norristown State Hospital, PA, a brain, spinal cord, and peripheral nerve specimens from St. Elizabeth's Hospital, Washington, D.C., and 3 plastinated canine hearts from Dr. Frank Johnson, AFIP. The Norristown collection has been catalogued almost completely. Five Norristown specimens await invasive testing for a pathological diagnosis.

Investigations in plastination were initiated by staff members attending the Plastination Workshop at the American Association of Anatomist meetings held in Washington, D.C., and a consultative visit by Dr. Gunther von Hagens. To support museum programs in plastination, collections, and medical education, active relationships have been established with WRAMC (Autopsy Section) and AFIP Tissue Repository. Wet tissue specimens have been received from these two divisions and are in the accessioning process.

Museum staff attended several conferences and presented papers or posters on various aspects of the museum collections at the Paleopathology Meeting, American Association of Physical Anthropologists, American Academy of Forensic Sciences, Northeastern Anthropology Association, University of Rhode Island, the University of Connecticut, and others.

The American Indian specimen inventory was refined in 1987, and consultations took place with the Smithsonian Institution regarding problem cases.

Planning for a Forensic Anthropology Course was initiated in 1987.

A major effort was placed on preparing a teaching exhibit for the Department of Pathology, Uniformed Services University of the Health Sciences. Betty White of that university worked with Museum staff to locate appropriate specimens in wet tissue storage for the exhibit.

Information on the specimens was retrieved as well as possible (the wet tissue files were in the process of being organized). Other information was retrieved from AFIP Consultative visits were made frequently Tissue Records. by Dr. Joan Kishel and Dr. Richard Marsella to provide differential diagnosis of the specimens. A record-keeping form was generated to document the differential diagnosis. Approximately 71 specimens were selected; the majority were wet tissue specimens. Boxes encasing a specimen were cleaned and the formalin replaced. While considerable information was located on many of these specimens, much of it is in raw form and needs to be revised and edited before files are created. This work remains to be done.

The Anatomy Division reorganized the administration of the Federal Stay-in-School Program for the museum. By the end of 1987, 6 student positions had been filled.

The American Journal of Physical Anthropology was added to Ash Library's holdings. Information requests numbered 181, 15 researchers or research groups were accommodated, and numerous behind-the-scenes tours were given.

HISTORICAL COLLECTIONS DIVISION

The Historical Collections Division of the Armed Forces Medical Museum is divided into two distinct units which often perform complimentary tasks: The Historical Artifacts Collections and the Otis Historical Archives.

Historic Artifacts Collection - Staff processed over 200 inquiries for individuals and agencies requesting specific information about the objects in the collection, their care, or the history and scope of the collections themselves. In addition to addressing specific needs, the division continued to perform primary and secondary research on its holdings to better enable researchers to use the over 100,000 objects within it, whether for loan, exhibition, study, or conservation.

Over eight hundred square feet of museum-quality steel shelving and cabinets were installed in the collection area for the storage of medium-sized artifacts. Approximately nine hundred objects have been placed in the storage area and inventoried onto an experimental automated database. Fifteen interior steel museum storage cabinets have been ordered to increase the storage capability by seventy-eight percent. An artifact classification system was adapted from a system developed under a grant from the National Endowment for the Humanities to the Howard Dittrick Museum of Historical Medicine in Cleveland. It is based

on the standard Medical Subject Headings used by the was successfully Medicine / and National Library of implemented in the reorganization of selected storage. This trial has led to a similar larger-scale project being planned for the organization of artifacts in storage. and Alan Hawk, museum Noe, Adrianne curator, technician for the collection, presented a talk on plans for implementing the classification system to the Medical Museums Association conference in Philadelphia as a part of a roundtable discussion on using Medical Subject Headings to classify artifacts. An automated database was designed for the museum to catalog the artifacts in the collection. The database is still in the development phase and will continue to be refined during the coming year.

The Billings Microscope Collection was transferred to a new location, the move providing much needed improved security for the well-known collection and related items. Four hundred square feet of museum-quality steel shelving were installed to accommodate the microscopes and their accessories. As a part of the relocation process, the collection was studied, organized, and inventoried onto an automated database.

active in maintaining Staff members have been connections with other museums, the academic community, and relevant private and government agencies. For example, several staff members travelled to the Margaret Woodbury Rochester, New York, to observe Museum in state-of-the-art museum techniques and exchange ideas with museum professionals. Research assistance or a variety of museum practices were consultations on provided to a number of organizations, including the United States Air Force Project Warrior film series on the history of military medicine, the National Library of Medicine, the Science Museums Collaborative, the National Aeronautics and Space Administration, the Mutter Museum of the College of Physicians of Philadelphia, the Smithsonian Institution, the museum of the American Academy of Ophthalmology, and publicly funded film projects on the history of medicine. participated in a wide variety of professional Staff organizations -- the Washington Museums Collaborative, the History and Archives Committee of the Aerospace Medical Association, the Society for the History of Technology, the American Association for the History of Medicine, the Association, the Washington Chemical Medical Museums Society, and the Washington Society for the History of Publications include contributions to journals Medicine. history of medicine, sciences, and museum the literature.

Historical Collections staff also participated in the exhumation of American soldiers form the War of 1812 at Fort Erie, Ontario, Canada. They contributed to their subsequent study, providing medical historical background to aid in the interpretation of findings and to advance the understanding of early nineteenth century military medicine.

DAN BENNETT Otis Historical Archives - There were 374 consultation requests from persons seeking information on the collections reposited in the museum's archives. These requests which were all answered, were categorized as follows:

91 written requests 73 visiting researchers 181 telephone requests

29 AFIP staff requests (excluding museum personnel)

The primary research work effort during the year continued to be in the area of archival arrangement, description, and storage of a backlog of unprocessed materials. Major strides were accomplished in reducing this backlog, and for the first time in four years new materials acquiesced did not surpass those previously housed in the collections. In the Otis Historical Archives, approximately 186 cubic feet of records were processed and 91 cubic feet of new materials were added to the collections during the year. Our descriptive efforts accomplished preliminary surveys of seven photographic series as well as 12 record group descriptions and finding aids. The Archives was involved in cooperative research projects for a number of federal agencies, military branches and organizations, and civilian groups, including the Surgeon General's Office, the Smithsonian Institution, the Public Health Service, WRAMC, and the Military History Institute. Again this year, the Archives assisted the JAG, Department of the Army, and the Asbestos Litigation Branch, Department of Justice, in accessing the Vorwald Collection.

The education mission of the Archives includes the tour, loan, consultation, and exhibit support programs. Total visitation for the year was 161 persons; 77 individuals (31 military personnel), in addition researchers, were given extensive tours of the archival program and holdings. Thirty-Two items were loaned from the Archives collections to military organization branches and to federal agencies, and 4 items were processed back into the holdings. Of the 301 research requests

received during the year, approximately 15 involved preservation archival program and development consultation. In the area of museum exhibit support, two exhibits were conceived and curated to completion. archivist also assisted the Army Surgeon General's Office providing research and development support for an oit commemorating one hundred years of the Army exhibit Hospital Corps. The archivist provided the same type of support for a multi-media presentation commemorating the first forty years of the Army Medical Specialist Corps. Additional intensive research assistance was given to projects in support of AMEDD, William Beaumont Army Hospital, the Air Force Surgeon General's Office, and the Public Health Service.

MUSEUM PROGRAMS OFFICE - UNDER PINSKER

- I. With a mandate for broader scope and additional responsibilities, designation of the Public Education Office was changed to the Museum Programs Office. The following programs were created and instituted:
 - A. Docent Program. During early winter and late fall a total of four groups of volunteer docents (museum teacher-guides) were recruited and trained to give lesson tours in the museum. These tours are available to the public on weekdays and weekends. Docents are requested to work with a maximum group size of 15 people per docent; 45 people may be accommodated at any one time with three docents working with them. This reduced the number of people on any one tour from a prior maximum of 60 people to one tour coordinator in previous years.
 - B. Other Volunteer Programs.
 - 1. Information Desk receptionists have been recruited and trained to answer phones for the museum, greet and refer visitors as necessary, respond to inquiries, and issue parking permits.
 - 2. Research, archival, and clerical volunteers have been recruited and placed within the following sections of the Museum:
 - a. Archives
 - b. Office of the Registrar
 - c. Historical Collections
 - d. Anatomical Collections
 - e. Museum Programs Office

- C. Concentrated effort on the part of the public relations specialist to increase museum visibility and visitation.
- D. A more comprehensive outreach effort to learn how the museum can better serve the community.
- E. More comprehensive liaison with educational institutions (i.e. high schools, universities, etc.) to gain further knowledge of their specific needs and be able to provide materials to augment their educational horizons.
- F. Continuing liaison functions (i.e. Blue Ribbon Panel, etc.) in keeping with recommendations for future museum direction and development. A temporary exhibit was created and installed for the WRAMC Patient and Post Library and remained in place throughout the summer of 1987. A new exhibit to serve as an introduction to new museum exhibits was created and installed in the AFIP lobby. Other exhibits went on loan to such agencies as the Army Surgeon General's Office and the Pentagon. Other exhibits created and designed include Osteopathology for the Museum and Forensic Anthropology for an AFIP window case.
- 11. The Museum Programs Office assumed responsibility in the coordination for all interdepartmental efforts for the Ash Lecture, including catering arrangements and training of docents, who were available to provide content information for the guests at the reception.

111. Public Relations.

- A. Actual newspaper/magazine contracts included The Washington (Post Magazine Section, New York Times, Town & Country Magazine, Washington Times, the Washington Post Weekend Section, and the Museum & Arts Washington Magazine. Broadcast time contact was made with WGMS radio station.
- B. Communications with a number of agencies such as NIH, USPHS, USUHS, the Washington (D.C.) Volunteer Bureau, and the suburban volunteer bureaus were also established.
- C. One half-time position of Tour Coordinator was converted to a half-time position of Community Relations Specialist. The work entails community relations and media outreach efforts, newspaper calendar listings, outreach efforts to garner

JEANNE LEVIN publicity, the coordination of media requests with museum staff, and position papers for the Museum in subjects such as Native American Remains and Teratology. The job of the other half time Tour Coordinator became concentrated in areas of tour coordination, the scheduling of all volunteers and student interns, and creation and maintenance of a circulating volunteer library.

- D. Establishment of liaison with the Patient and Post Library and Social Work Services Department of WRAMC in an effort to coordinate services and provide information for patients and families about their illnesses.
- E. Creation of a new Museum four color illustrated brochure which will become available to the public in the early part of 1988.
- F. In mid year 1987 the Exhibits Program transferred from the Division of Historical Collections to the newly created Museum Programs Office and all functions of the Museum relating to and providing services for the general public were combined in this new Office. The Exhibits Program work was begun for an AIDS education exhibit with a historical component which will be collections based. New labels for other exhibits and corrections to exhibits already in place were also made.

It should be noted that while the total number of visitors actually increased by 1,124 and the number of walk-ins increased by 4,149, scheduled tour visitors were down by 3,030 compared to the year 1986. The decrease in visitors on scheduled tours was due primarily to two major factors: No tours were given for two months (February and March) due to the new docent training program and the tour participants were limited to 15 visitors for each docent. The time spent with each individual tour group is now "quality time" (i.e. the tours are now enabling visitors to see effectively presented exhibits -- ones that will allow them to interact with their docent for a discovery/learning type lesson/experience), whereas, before, quantity was down because of the new training program and the required recruitment of docents. It should be noted that a number the schools which have participated in both tour programs (1986 and 1987) have commented verbally and through letters that they appreciate the new 'in depth and individualized approach." The total hours of work logged by the volunteer staff during the 12-month period of 1987 2,819 The number of hours hours.

by the volunteer staff is equivalent to one and a half full-time, paid employees.

- IV. Broad goals for the Museum Programs Office for 1988
 - A. The completion, installation and opening of the AIDs education exhibit.
 - B. Recruitment and training of a larger volunteer corps to provide support and services to the public and museum staff.
 - C. Other public relations efforts involved the establishment of contact with various schools (i.e., high schools, universities) in an effort to work with their curricula in order to individualize tours to their specific needs.
 - D. The Museum Programs Office offered highlight tours at the monthly Newcomers Briefing and also provided tours for guests in support of the staff of AFIP.
- V. Attendance: The following were recorded for the year 1987:

Number of scheduled tours	182
Number of scheduled tour visitors	5,102
Number of walk-in visitors	24,659
TOTAL NUMBER OF VISITORS	29.761

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J. Thomas Stocker Colonel, MC, U.S. Army Deputy Director Appointed July 1987

The MIRER (Museum Illustration Research Education Repository) professional support services include the National Museum of Health and Medicine of the AFIP, the Center for Medical Illustration, the Center for Advanced Medical Education, and the Department of Repository and Research Services. These several functions interact closely with all departments of the Center for Advanced Pathology directly supporting the mission of consultation, education,



NATIONAL MUSEUM OF HEALTH AND MEDICINE

Marc S. Micozzi, M.D., Ph.D. Director Date of Appointment - 24 June 1986

MISSION, PLANNING AND GOALS

The planning and development effort for the medical museum advanced rapidly during 1988, facilitated by discussions of the "Blue Ribbon" Panel chaired by

the Under Secretary of Health and Human Services and by actions of the AFIP Directorate and AFIP Board of Governors. A definitive mission statement for the medical museum was developed: "to further public and professional understanding of human health and progress against disease." The Association of Military Surgeons of the United States (AMSUS) became the official sponsor of the Medical Museum Registry. In June, Surgeon General C. Everett Koop officially opened the new multimedia, interactive AIDS Education Exhibition in the museum. This opening coincided with the Surgeon General's mailing of the AIDS prevention brochure to every household in the nation; the exhibition was planned with the U.S. Public Health Service to incorporate themes from this national mailing. In October, a forum was held, "Planning the Future of a National Museum of Health and Medicine."

The forum was hosted by Hon. Don M. Newman, Under Secretary of Health and Human Services, Chair of the "Blue Ribbon" Panel; Hon. Robert Windom. M.D., Assistant Secretary for Health, representing Hon. William Mayer, M.D., Assistant Secretary of Defense (Health Affairs) and Chair, AFIP Board of

Governors; Surgeon General C. Everett Koop, representing the U.S. Public Health Service; and CAPT Robert F. Karnel, MC, USN, Director of the Armed Forces Institute of Pathology. The forum was attended by over 65 national leaders in business, education, medicine, and public health, including James Sammons, M.D., Executive Vice President of the American Medical Association; Theodore Cooper, M.D., Ph.D., former Assistant Secretary for Health and currently Chairman and CEO of the Upjohn Company, James Mason, M.D., Director of the U.S. Centers for Disease Control; and several distinguished local and national officials. The keynote speaker was Hon. Otis R. Bowen, M.D., Secretary of Health and Human Services. All of the presentations and the active open discussion emphasized the need for a national museum of health and medicine, its role in public health education and teaching future generations of health professionals, and the potential of the medical museum to fulfill these roles based upon its history, its collections, and its projected operations and programs. Also emphasized was the need for additional consultation, planning, and support for a national museum program. Accordingly, three working groups were formed: (1) a strategic planning group to discuss auspices, location, size, scope, and operations; (2) a private sector group to discuss strategies for a national development effort; and (3) a "Friends of the Museum" group to study strategies for establishing a broad-based subscription organization for health professionals and the museum-going public nationwide.

In December, the AFIP Board of Governors officially changed the designation of the museum from the "Medical Museum of the Armed Forces Institute of Pathology" to the "National Museum of Health and Medicine of the AFIP." One suggested course of action is to seek approximately 200,000 square feet in a downtown Washington location and transfer the public exhibits program over the next 2 to 3 years to that location. Ten major unfunded requirements were developed by the museum for exhibitions, programs, and projects to be implemented over the next three years and to be housed in the desired new facility. In December, an exterior sign was installed in front of the medical museum for the first time since 1985.

STAFF:

Office of the Director

Marc S. Micozzi, M.D., Ph.D., Director Dean Gibson, Ph.D., Special Assistant (detailed 1 July 1988) Kelly Mathers, MA, Registrar (resigned 6 June 1988) Theresa Strong, Staff Assistant

Division of Historical Collections

Adrianne Noe, Ph.D., Curator Alan Hawk, M.A., Collections Manager

Daniel W. Bennett, III, M.A. candidate, Archivist Robert Montgomery, M.A., Archivist Technician

Division of Anatomical Collections

Gloria y'Edynak, Ph.D., Curator Paul Sledzik, M.A., Collections Manager Sean Murphy, M.A., Osteopathology Catalogue Project

Museum Programs Office

Orla O'Reilly, Museum Programs Officer Douglas Landry, Visual Information Specialist Jeanne Levin, Tour Coordinator (half-time) Charlotte Brody, Community Relations Specialist (half-time)

Medical Museum Registry/American Registry of Pathology Richard Rapoza, Museum Exhibit Specialist (effective 1 June 1988)

In addition, NMHM maintained an active federal stay-in-school work/study program for eligible college students and a full summer student program and accommodated graduate student programs with local and national universities during the year.

Personnel

The manpower survey officially recognized the structural reorganization of the museum, begun in 1986 to come into alignment with proper museum organization and functions per DOD-IG recommendations. The Museum Programs Office and the museum registrar position were recognized. Additional new personnel requirements were recognized in the Office of the Director, the Historical Archives, and the Anatomical Collections Division.

Numerous attempts to upgrade the newly recognized museum registrar position above the GS-7 level were unsuccessful; therefore, retention or recruitment of a qualified museum registrar was not possible in 1988. The Office of Personnel Management has been asked to investigate these difficulties with classification, retention, and recruitment for the museum registrar position.

Contracts were prepared through the Medical Museum Registry/ARP to hire a Plastlnation Laboratory Technican, effective August 1988. Due to delays at WRAMC, however, this position could not be filled during 1988.

The necessary expansion in staffing for the National Museum of Health and Medicine is anticipated to take place primarily through the Medical Museum Registry/American Registry of Pathology

Research and Education

Independent and collaborative research and education activities continued in 1988 as in the past. Symposia were organized for the American Academy of Forensic Sciences, Physical Anthropology Section for 1988 and for 1989. Invited lectures and seminars were presented to the Institute for Cancer Research, Philadelphia, PA, and to the Johns Hopkins University School of Public Health on "Applications of Medical Anthropology to Cancer Prevention Research" and on "Body Size, Body Composition and Cancer"; to the Medical University of South Carolina on "Forensic Anthropology and Archaeology"; to the Washington Society for the History of Medicine on "The Fort Erie Project" and on "Planning the Future of a National Museum of Health and Medicine"; to the Medical College of Ohio, on "Forensic Medical Sciences Day", and on "Introduction to AFIP"; and to the American Academy of Dermatology on the "History of the Army Medical Museum."

Abstracts of Papers Presented

Micozzi, M.S.: Fatal complications of hypertension due to hydrogen sulfide exposure, Abstract, American Academy of Forensic Sciences, Philadelphia, PA, 1988, p. 95.

Saul, F.P., Micozzi, M.S.: The identification of tleshed remains: The changing role of the forensic anthropologist, Ibid, p. 108.

Micozzi, M.S.: Paleopathology and the Armed Forces Medical Museum. Abstracts, Paleopathology Club, International Academy of Pathology (USCAP), Washington, D.C., 1988.

Publications

Micozzi, M.S.: Cancer In Anthropometric Standardization Reference Manual, edited by Lohman, T.G., Roche, A.F., Martorell, R., Champaign, IL, Human Kinetics Publishers, Inc. 1988, pp. 151-154.

Albanes, D.A., Jones, D.Y., Schatzkin, A.G., Micozzi, M.S., Taylor, P.R.: Adult stature and risk of cancer. Cancer Research 48: 1658-1662, 1988.

Eveleth, P.B. and Micozzi, M.S.: Growth variations in children and chronic diseases in adults. In Crecimiento y desarrollo del nino en las Americas. Hechos y tendencias, edited by Cusminsky, M., Moreno, E., and Suarez-Ojeda, E.N., Washington, D.C., Pan American Health Organization. Scientific Publication No. 510, 1988.

Micozzi, M.S. and Albanes, D.A.: Three limitations of the body mass index, Am. J. Clin. Nutr. 48: 691-692, 1988.

Micozzi, M.S., Brown. E.D., Taylor, P.R., Wolfe, E: Carotenodermia in men with elevated carotenoid intake from foods and B-carotene supplements, Am. J. Clin. Nutr. 48: 1061-1064, 1988.

Carter, C.L., Corle, D.K., Micozzi, M.S., Schatzkin, A., Taylor, P.R.: A prospective study of the development of breast cancer in 16,692 women with benign breast disease. Am. J. Epidemiol. 128: 467-477, 1988.

Micozzi, M.S.: Comments on acculturation and health in the highlands of Papua, New Guinea: Dissent on diversity, diets and development. Current Anthropology 29: 285, 1988.

Stevens, R., Jones, D.Y., Micozzi, M.S., Taylor, P.R.: Body iron stores and the risk of cancer. New England Journal of Medicine 319: 1047-1052, 1988.

Anatomical Division NATIONAL MUSEUM OF HEALTH AND MEDICINE

<u>Summary:</u> Anatomy staff participated in three field excavations: the battlefield cemetery from the War of 1812 at Ft. Erie, Ontario, Canada; the Civil War bat tlefield at Antietam; and the ancient Inca cemetery at San Pedro de Atacama; Chile which contained mummies, that were the focus of paleopathologic examinations. The division initiated the Osteopathology Catalogue Project, completed the First Annual Forensic Anthropology Course; initiated a reorganization of the human skeletal collection and implemented "Paradox" as a cataloguing program; produced a teaching exhibit for the Department of Pathology at the Uniformed Services University of the Health Sciences; retrieved the wet laboratory in G-035c for museum function; mediated a legal relationship with Walter Reed Army Medical Center for the receipt of autopsy organs; received specimens from 18th century, War of 1812, American soldiers buried at Ft. Erie, Canada; received 26 pathologic fetal and neonatal specimens from the AFIP Tissue Repository; presented papers and organized roundtable discussions on collections in museums, meetings, and departments nationally and internationally; engaged in collections-based and field research; initiated planning for the "Human Reproduction, Growth and Development Exhibition"; coordinated collections-based projects for exceptional high school students and for college and graduate students during the summer.

The Osteopathology Catalogue Project includes the description and differential diagnosis of specimens, serial studies of fracture healing and infectious disease process, a history of the collection, and well-documented case histories. The catalogue will have applications for forensic science, military medicine, medical history, and paleopathology. The majority of specimens had been diffentially diagnosed by year's end. The team is looking at options for publication. The project will be completed by the end of 1989. A tentative title is Catalogue of the Osteopathology Collection of the National Museum of Health and Medicine, AFIP: Pathologic, Medicohistorical and Forensic Studies in Human Skeletal Remains.

The First Annual Forensic Anthropology Course was successfully completed, February 22-26. The maximum enrollment of 30 participants attended lectures in Russell Auditorium, participated in laboratory sessions in Hammond Hall, and studied educational exhibits in the museum. Most of the participants were physicians. The course was five days long, the fifth day was held at the Smithsonian Institution, Division of Anthropology.

The Uniformed Services University of the Health Sciences Teaching Exhibit, displaying a full range of current and historic pathology (71 specimens), was prepared for the Department of Pathology in January with the aid of Ms. Betty White and Dr. Joan Kishel of USUHS.

Major Accessions Included 26 abnormal fetal and neonatal specimens received from the Tissue Repository, Armed Forces Institute of Pathology in March. Pathologic specimens from the War of 1812 burials at Snake Hill, Ft. Erie, were received, catalogued, photographed, and housed. Ft. Erie Project documentation was collected and inventoried.

Collections Management: In 1988 a new system of computer hardware and software made recataloguing the entire skeletal collection possible. The revised catalogue is designed to facilitate both collections management and the Osteopathology Catalogue Project. One thousand five hundred dry bone specimens been entered into the computer; 500 specimens have been described and await data entry; and an additional 500 require descriptions.

Exhibits: The Anatomical Division provided support for the AIDS exhibition and completed the osteopathology exhibit. Planning began for the "Human Reproduction, Growth and Development Exhibition." in collaboration with the Department of Pediatric Pathology, AFIP.

Fieldwork:

- 1. Ft. Erie: Skeletal data collection and analysis took place in Toronto in January.
- 2. Antietam Battlefield National Park: A cooperative survey field excavation with the National Museum of Health and Medicine, the Smithsonian Institution (Division of Anthropology), and the National Park Service occurred in August.
- 3. San Pedro de Atacama, Chile: field excavation of mummified burials provided a resource for the teaching of paleopathology; museum staff menber were part of the paleopathology team in a National Science Foundation Training Grant. All funding was provided by the National Science Foundation.

Museum Lectures:

Dr. Ron Williamson - "The Fort Erie Project."

Dr. Marc Kelley - "Osteopathology as a Tool for the Medical Researcher."

Docent Training and Student Assemblies: The division fully participates in docent training and in lectures or assemblies for visiting high school students. The anatomical collections manager supervised two high school students, two stay-in-school college students, and one temporary anatomical registrar during the summer of 1988.

Forensic Sciences Day: The Anatomy Division participated in the program at the Medical College of Ohio, Toledo, in October 1988. Included in this program were lectures given by Dr. Marc Micozzi on the history of the museum, by Paul Sledzik on the Ft. Erie Project, and by Dr. Robert Zalme on the role of the AFIP in the identification of remains from a mass disaster. Museum staff, which also included Sean Murphy and Dr. Gloria y'Edynak, provided demonstrations of torensic cases for the exhibition.

Symposia Presented:

- "Fusion/Con-fusion", symposium on ankylosing spondylitis and rheumatoid arthritis at the Paleopathology Meetings, April, 1988, Kansas City, Sean Murphy, Dr. Marc Kelley.
- 2. "Tuberculosis Workshop," a demonstration of museum specimens with case histories in some cases, Paleopathology Meetings, April 1988, Kansas City, Dr. Marc Kelley, Sean Murphy, Paul Sledzik.

Symposia Planning:

- 1. "Fort Erie Symposium," Northeastern Anthropological Association Meetings, March 1989, Montreal, Paul Sledzik.
- 2. "Bone Response to Trauma," Paleopathology Meetings, April, 1989, San Diego, Sean Murphy, Dr. Marc Kelley.
- 3. "Genetic and Environmental Components of Tooth Size and Morphology: Implications for Population Studies, American Association of Physical Anthropology Meetings, April 1989, San Diego, Dr. Gloria Edynak.
- 4. "The Army Medical Museum, the Anthropological Society of Washington, and the <u>American Anthropologist</u>: Foundations of American Anthropology," American Anthropological Association, November, 1989 Washington, D.C., Paul Sledzik and Dr. Gloria y'Edynak.

Anatomy Staff Non-Collections-Based Research:

Marc Kelley, Sean Murphy, and Diane LaVeque, "Tuberculosis in the Prehistoric Native Americans of the Upper Missouri River Basin"

Gloria y'Edynak, "Mesolithic and Neolithic Dental Reduction in Yugoslavia"

Gloria y'Edynak "Disease as a Selective Agent in Post-Pleistocene Yugoslav Dental Reduction."

Gloria y'Edynak, "Recent Evolution of Craniofacial Structure", as a chapter in Complex Craniofacial Anomalies, edited by Craig R. Dufesne, M.D.

Papers Presented:

- Paul Sledzik, 1988, "A Method for Determining the Duration of Osteomyelitic Infection in Dry Bone," American Association of Physical Anthropologists Meeting, April, Kansas City, Missouri.
- Paul Sledzik and Sean Murphy, 1988, "Paleopathology and the Armed Forces Medical Museum," University of Tennessee, May, Knoxville, TN
- Paul Sledzik, 1988, "A Collection of Curiosities: The Anatomical Collections of the Armed Forces Medical Museum," San Diego Museum of Man, September, San Diego, CA.
- Gloria y'Edynak, 1988, "Yugoslav Mesolithic-Neolithic Dental Reduction," International Congress of Anthropological and Ethnological Sciences, July, Zagreb, Yugoslavia.

Anatomy Staff Collections-Based Research:

- Paul Sledzik, 1988, "A Method for Determining the Duration of Osteomyelitic Infection in Dry Bone," M.A. thesis, University of Connecticut.
- Paul Sledzik, "How Sharper than a Serpent's Tongue: Cutmarks on Bone and the Instruments that Make them," poster accepted for the American Association of Physical Anthropologists Meeting April, 1989, San Diego.
- Paul Sledzik and Peer Moore-Jansen, 1989, "Dental Disease in a War of 1812 U.S. Burial Ground: Implications for Nineteenth Century Dental Health," In: Marc Kelley and Clark Larsen, eds., <u>Advances in Dental Anthroplogy</u>, Alan R. Liss, Inc.
- Paul Sledzik, 1989, "The History of the Anatomical Collections of the Army Medical Museum," In: Catalogue of the Osteopathology Collection of the National Museum of Health and Medicine, AFIP: Pathologic, Medicohistorical and Forensic Studies in Human Skeletal Remains.
- Marc Kelley, Sean Murphy, Rubina Patel, and Marc Micozzi, "Isolation and Cultivation of Acid-Fast Bacilli from Museum Skeletal Specimens."
- Sean Murphy, 1989, "Hyperostosis Frontalis Interna," M.A. thesis, University of Connecticut.
- Gloria Edynak, Sarah Lawrence, Glenn Wagner, Leon Kazarian, Robin Baver, Kay Behrensmeyer, Dennis Stanford, "Study of Bone Fracture Patterns in Unidentified Remains from an Aircraft Accident in Iceland Recovered After Thirty Years Exposure to Glacial Action."

ANATOMICAL COLLECTIONS NATIONAL MUSEUM OF HEALTH AND MEDICINE

NAME.	DATES	TOPIC RESEARCHED
Jason H. Calhoun, M.D., M. Eng., Univ. Texas Medical Branch, Div of Orthopaedic Surgery	10/14/87- 2/5/88	Requested information and slides on osteomyelitis and trauma skeletal specimens, specifically of the foot and ankle.
David Simms, M.D. Univ. Oklahoma, Dept. of Otorhinolaryngology	2/11-5/4	Research on human temporal bone growth and development using human fetal collection. Measurements and photographs taken.
Craig R. Dufresne, M.D. Johns Hopkins Hospital, Department of Surgery	2/4-3/16	View and study the teratology collection
John Balz	3/15-4/5	Research on tapeworm for elementary school report.
Bruse Pearson, Beatrice Fensten, Robert Priesler	4/19	Viewed teratology collection for purpose of studying form in art.
Dr. Marjorie England, Univ. Leicester, Dept. of Anatomy	5/3-6/27	Requested information on histological photographs or specimens of human embryology.
Joan Williams –Thomas, Ph.D., Univ. District of Columbia	6/20-8/2	Have student view and study teratology collection. Photographs were requested and forwarded.
Edward J. Toth, US Army Foriegn Counter – intelligence Activity	6/7-6/27	Information on LaGarde shot fracture studies and related information. Videotape requested and forwarded.
Max Klohn, M.D., Institut de Morphologie, Geneva, Switzerland	8/4	Research and data collection on kidney stone collection (see formation in Research Request file).

NAME	<u>DATES</u>	TOPIC RESEAF	<u> CHED</u>
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Terry Horowitz, Horowitz-Seigel Assoc. 9/8-9/22.

View Sickles specimen and documentation; discuss Civil War medical practices.

Nolan Karp, M.D., New York Univ. Medical Center

9/12-pres

Study and measure fetal/infant skeletons (2nd metatarsal, iliac crest, mandibular condyle) for application in plastic surgery for hemifacial microsomia.

Robert Berkowitz, M.D., 10/25-pres Children's Hospital National Medical Center, Head and Neck Surgery Sinus measurements from CT scans and external measurements on fetal/infant crania for use in sino-nasal tract surgery.

Gabrielle Hodson, M.A. 12/2-pres

Determination of relationship of distal humeral bicondylar breadth and humeral midshaft circumference using Civil War skeletal collection.

Historical Division

Historical Collections

The Historical Collections staff responded to 84 requests for information involving items from the collection and provided answers for numerous general and specific questions about the history of medicine, collections, management and preservation techniques. Assistance was provided to numerous large research activities such as the Center of Military History, the Smithsonian Institution, the National Institutes of Health, the National Library of Medicine, and the United States Public Health Service. The staff provided assistance to researchers for two major film projects, including a series for the British Broadcasting Corporation on the history of military medicine in the United States and a production for a pharmaceutical firm. Eleven loan requests for over four dozen items were processed. Items were loaned for both research and publication purposes and for exhibition. Five significant microscopes from the Billings collection were included in an international exhibition celebrating the tercentenary of William III and Mary II; the staff performed extensive research for the published catalog accompanying the exhibition.

Twenty-five donations were processed, adding over 775 items to the Historical Collections. In particular, items relating to AIDS and the health care professions and the history of x-ray, diagnostic, therapeutic, and plastic surgical technologies were included. The largest single donation was that of over 500 items from the office of Dr. Naomi Kanof, a local dermatologist of international renown.

In 1988, approximately 4,500 artifacts were recorded, inventoried, entered into a master computer system that creates an automated finding aid, and stored in appropriate controlled-environment cabinets. Three hundred

additional artifacts have been fully catalogued. The collection of forty-five turn-of-the-century x-ray tubes and apparata has been catalogued and housed in custom boxes that protect the fragile glass objects.

The Historical Collections staff has actively supported exhibit programs at the museum by curating the "History of Sexually Transmitted Disease" component of the AIDS exhibition and an exhibit of wax dermatological models. In addition, exhibition, curation, and research support were provided for forthcoming exhibits at the museum: AIDS and the Health Care Professions, The Fluorescence-Activated Cell Sorter, and Medical Transportation Models.

The staff has been actively forging and maintaining ties with other museums and professional organizations by presenting talks and papers at the Aerospace Medical Association, the History Subgroup of the American Association of Ophthalmologists, the History of Dermatology Society, the American Association for the History of Medicine and its AIDS History Project, the Washington Society for the History of Medicine, and the Medical Museums Association.

Otis Historical Archives

There were 317 consultation requests from individuals seeking information from the archives. These requests were categorized as follows: 89 written requests, 83 visiting researchers assisted, 129 telephone requests answered, and 16 AFIP staff requests. These numbers do not reflect museum staff's research activities.

During 1988, the archives added a moveable aisle storage system, effectively increasing shelf storage by approximately 70 percent. Reference services for the archives were suspended for a three-month period to facilitate the move and reinstallation of collections. Current storage capacity is expected to allow adequate storage for three years of moderate growth.

The primary research and work efforts during the year continued in archival management, description and proper storage of a backlog of previously untreated and undescribed materials. Substantial numbers of finding aids were produced for the most heavily used collections. Approximately 100 cubic feet of paper records were processed, and nearly 100 cubic feet of materials were added to the collections. The archives received and processed 229 books as transfers and gifts. Active volunteer support allowed archival preservation activities on several significant photographic collections including the Woodward glass plate negative collection and the Roy Reeve photograph collection, each numbering in excess of 50,000 items. Division staff members were involved in cooperative research projects for several federal agencies, military branches, and civilian organizations, including the United States Army Surgeon General's Office, the Center for Military History, Walter Reed Army Medical Center, the United States Public Health Service, and the Smithsonian Institution. The archives continued to assist the Judge Advocate General, Department of the Army, and the Asbestos Litigation Branch, Torts Division, Department of Justice, in compliance with orders concerning access to the Arthur J. Vorwald Collection of Industrial Medicine.

The education mission of the archives included tours, loans, consultations, and exhibit programs. Visitation to the Archives exceeded 100 individuals in addition to researchers and tours in support of the United States Army Nurse Recruiting Program. Twenty-nine items were loaned form archival collections to exhibiting institutions, and the archives contributed extensively to the AIDS exhibition currently on view at the museum.

\$27,000

Publications

Hawk, A.: Transportation of the Wounded: The Models of the Armed Forces Medical Museum. Caduceus 3: 1-25, 1988.

Noe, A.: Aviation and Aerospace Medicine. In The Smithsonian Institution National Air and Space Museum Annotated Bibliography of Aviation and Aerospace History, edited by DeVorkin, D. and Hardesty, V., Chicago, Garland Press, 1988.

Museum Programs Office

As a result of the previous AFIP manpower survey, the programs office mission statement was established, manpower requirements were increased, and new staff members were recruited. Two positions were funded for AIDS education through the American Registry of Pathology—a health educator and a visual information specialist. A part-time community relations specialist was recruited through AFIP. Although the office is new, several important programs were developed. More contacts were made with supportive community and health agencies, and ideas were formulated for the National Museum of Health and Medicine. An administrative structure was established, and functions were more clearly defined for the staff.

Increased programming and planning facilitated permanent working relations with many local and national agencies, several health institutes at NIH, the District of Columbia Health Department, the National Park Service, the National Mental Health Association, the March of Dimes, the Centers for Disease Control, the U.S. Public Health Service, and local hospitals and school systems. International links were established while presenting the Museum AIDS exhibit to professional conventions in Puerto Rico, San Francisco, and Charleston, SC.

AIDS Education and Related Programs

In response to the increasing public health dimensions of AIDS, the programs office developed an AIDS education exhibition that was opened at the Annual Ash Lecture on June 1 by Surgeon General C. Everett Koop. The exhibition emphasizes methods of transmission and prevention as well as presenting a historical and social context for sexually transmissible diseases. The exhibit was developed with the cooperation of the U.S. Public Health Service and the National Institutes of Health. Two positions were funded to design the exhibit and develop AIDS public education programs.

Not only was this one of the first museum AIDS exhibits in the world, it was also the first time in the recent history of the Medical Museum that an exhibit was developed to educate visitors about current health concerns. Many organizations were contacted to facilitate planning, and working relationships were established that are now being used for future exhibits. A cooperative interagency exhibit design relationship was established with the Medical Art Center at NIH, resulting in a modern state-of-the-art interactive exhibit. When entered in competition, a three-dimensional model of the AIDS virus was awarded first place prize by the Association of Medical Illustrators, indicative of the design quality.

Museum Education and Community Outreach

Other methods, procedures, and functions were identified and developed by the staff and are condensed in the following paragraphs. The number of programs planned is augmented to the work done by the office in preparing for a future move and intensive programming.

a. Publicity

The museum received multi-media coverage of the museum collections and programs. The addition of a part-time community relations specialist and the new AFIP PAO position ensured continuous announcements of the facility opening in local civilian and military papers. Articles were written and published in The Washington Post, The Washington Times, The Boston Globe, The San Diego Reader, local university newspapers, Soldier Magazine, Clinical Chemistry News, and several other sources. A 13-minute staff interview was recorded and distributed by National Public Radio on "All Things Considered." The ABC affiliate station in Dallas filmed a feature story that was aired in the Southwest. The museum's brochures which were ordered the previous year, arrived and were distributed. A new brochure is being designed that reflect new exhibits and the museum's new official designation as "National Museum of Health and Medicine of AFIP."

As the programs office expanded, mailing lists were developed for media, tour companies, and all local schools and hospitals, and professional links were developed with these organizations. Many of the contacts that were made involve committing the museum to a program or offering it as a resource to a community organization. The museum now requires a full-time community relations specialist. Funds will be required to join local organizations such as the Washington Convention Center, the Chamber of Commerce, and Amenity Planners, and for a travel budget for outreach programs.

b. Public Education and Volunteer Program

The number of walk-in visitors to the museum increased this year to a total of: 24,596. A random survey of 525 visitors to the museum cited "word of mouth" as their primary way of hearing about the museum. Hopefully, in 1989 there will be more reports by local papers. One hundred fifth-five tours were scheduled and individually led by docents with 3,970 participants. This figure is lower than in previous years. In previous years, "tour" groups of 60 or more came to the museum and were given introductory lectures in Russell Auditorium before being released into the museum unaccompanied. Limiting tour groups to 25 or less ensures that the tour guide (docent) gives an informative session and is better able to answer the public's questions as they accompany the docent around the collections. We have delayed mass mailings to tour groups and schools until the office has trained more docents. Several graduate docents from preceding years became ill or had other commitments. The total number of volunteer hours increased from last year, totalling 3,640. Although the number of docent hours decreased, the increase in total hours reflects those volunteers who covered the desk on weekdays and weekends and worked in the archives and in the historical and anatomical divisions. Additional staff support for the museum that required training/education came from two part-time learning-disabled students from Rock Terrace and two students from the Barry School on a 10-week social-service internship.

Consultation and outreach activities with other organizations included logistical arrangements for seminars in Russell Auditorium for The American Academy of Dermatology and the Medical Registrars of Kaiser Permanente, etc. AIDS Education Consultation was provided to agencies as diverse as the Postal Workers Health Insurance program and the Prince William County Schools System. "On-Line" Productions used the museum's microscope collections as a backdrop when producing a film for Lederle Labs about advances in biomedical knowledge. The Writers Center conducted a journalism evening session at the museum, touring the facility and interviewing the staff. The first annual Smithsonian Resident Associate program was scheduled and has now become a recurring sell-out event.

Lectures on the museum education profession were presented by visiting staff members in graduate classes at the University of Maryland and George Washington University. Assistance and guidance was provided to organizations interested in establishing museum programs such as the University of Maryland in Baltimore and the University Hospital in Riyadh, Saudi Arabia. The Smithsonian Institute has provided guidance for setting up a future travelling AIDS exhibit which would then take our collections to the nation. Initial contacts with women's groups have generated much enthusiasm for the Human Reproduction Growth and Development Exhibition. Out-of-state professionals have offered to present topics.

III. Future Planning and Implementation

Establishing links with local agencies has involved much effort and persistence. Once the initial communication is established, staff members must then educate as to who/what/why we exist and what we can offer. Hopefully, this situation will improve with more media coverage next year as the support groups are organized to establish a National Museum of Health and Medicine.

A slide presentation will be developed to enhance presentations given by the community relations staff attending out-of-state/local meetings.

A Friends of the Medical Museum organization will be developed. A questionnaire that was developed this year is still being distributed to determine the level of interest in activities, and newsletter topics and to compile a mailing list. Part-time positions must be increased to full-time status to assist in the planning and direction of a national program. We must listen to our various ad hoc panels and working groups, public interest surveys, visitor comments, and professional health promoters to determine what the public is interested in learning and to develop supportive programs based on the museum's collections. Programs can then be developed that reflect the nation's needs with the support of other health care professionals.

The services area of the program office will be developed. As the organizational structure evolves, staff members are added, and activities are planned, all of which will require support (e.g., program/brochure production, supplies and equipment, audio visual equipment, contracting of food service, speakers, visitor's programs, etc.). It is a challenging and exciting time for this office—considering prospective program ideas, organization, and tracking of action plans to accomplish a program of "national" scope.



NATIONAL MUSEUM OF HEALTH AND MEDICINE

Marc S. Micozzi, M.D., Ph.D. Director Date of Appointment - June 1986

MISSION

To further public and professional understanding of human health and progress against disease.

ORGANIZATION

The external organization of the museum continued to evolve towards an accreditable standard for personnel structure and operation with the establishment of an Assistant Director/ Curator position over the internal operating divisions: Archives, Historical Collections, Anatomical Collections, Exhibits Program and Museum Education Office. All positions in the internal operating divisions are currently staffed by Department of the Army civilian and American Registry of Pathol-

The external organization of the museum was established and as a public/private mutual cooperative effort in accordance with PL 94-361. The National Museum of Health and Medicine Foundation, Inc., was incorporated in the District of Columbia in June 1989 as a private non-profit, tax-exempt 501(c)(3) organization. The Foundation's Board of Trustees is chaired by Dr. C. Everett Koop and has representation from the AFIP, Department of Health and Human Services (HHS), National Institutes of Health (NIH), Smithsonian, American Medical Association, College of American Pathologists, the American Registry of Pathology and the health manufacturers and pharmaceutical industries. The charter of the Foundation is to raise funds to build and operate a new museum exhibition and public program facility in a location that will be more visible and accessible to the public. The Foundation's Board of Trustees elected officers, established a committee structure, and hired a professional financial development officer during 1989. Fundraising campaigns to private individuals, medical organizations and the corporate sector yielded nearly \$150,000 in "seed money" towards the 1990 Foundation operating plan and budget.

In addition, an interagency agreement was implemented with funds from USPHS to AFIP, to establish a museum planning office to help determine and develop a site, facilities requirements, organizational structure, personnel needs, and operating plan and budget for the new museum. Accordingly during 1989, executive, planning and administrative functions were established under the museum director. Congressional inquires were received as to programs and physical facilities requirements for both a new exhibition hall and for a collections management/research/conserva-

Museum staff developed a long-range plan for the public exhibition and education program to include exhibition halls on Human Life, Current Health Concerns, Medicine in New Environments,

International Health, Health Care, History of Health and Medicine, and Biomedical Research and Technology. It has been proposed that elements of this plan begin to be implemented in an existing facility on the national Mall during 1990/91. Press coverage of museum programs appeared several times in the <u>Washington Post</u>, as well as in many public newspapers and medical publications around the country.

MUSEUM PROGRAMS

A museum traveling exhibit program was initiated in 1990 with exhibits received at AFIP on loan from other organizations, and museum exhibits sent out on loan to other organizations. The first major exhibition to be loaned to the museum in its present location (since 1971) was "Through the Looking Glass: Headache Art" sponsored by Sandoz Pharmaceuticals, from September 1989 through January 1990. The museum prepared and installed an exhibition on "Autopsy: Where Death Comes to the Aid of Life" in conjunction with the annual Ash Lecture in June.

Exhibits were sent on loan to the Lee Building, Silver Spring, MD in conjunction with the museum's active participation in the Battle of Ft. Stevens 125th Anniversary observance which included public lectures and seminars at the Museum during June/July 1989. The Museum also participated with the San Deigo Museum of Man in the exhibit "Mummies, Mayhem and Miseries" which closed in May 1989 after having been visited by over 100,000 museum-goers in San Diego.

An interagency agreement was put in place between AFIP and the Office of Substance Abuse Prevention, DHHS, for development, design, fabrication and installation of a state-of-the-art exhibit/classroom/theater module on prevention of drug abuse utilizing new visual information technologies and informal education approaches (to be installed in 1990). Additional support was received through ARP for an exhibition on "Human Reproduction, Growth and Development" to be installed in 1990.

The Museum was selected as a participant in the Year 2000 Health Objectives Program, Office of Disease Prevention and Health Promotion, DHHS, and was requested to provide exhibits that demonstrate public awareness for each of 20 health objectives for risk reduction and disease prevention. These exhibits will be developed and displayed during the 1990's. The first demonstration project on our award-winning AIDS Education Exhibition will be sent for display in the Hubert H. Humphrey building, DHHS headquarters, on the Mall commencing summer/fall 1990. The Museum has proposed to DHHS that the exhibit program in the Humphrey building be expanded to allow the millions of visitors to the national mall each year to be exposed to health and medical exhibits.

The Museum submitted a proposal with the Pan American Health Organization to the Inter-American Development Bank for a multi-million dollar traveling exhibit program on the history of health and medicine in the New World in conjunction with the Christopher Columbus Quincentenary in 1992.

SCIENTIFIC RESEARCH

Museum staff developed a long-range scientific research program development plan based upon museum collections and staff expertise for anatomical and anthropometric analysis and technical methods development, human nutrition, autopsy repository, tissue preservation methods recovery and analysis of human remains, forensic medical sciences, and interdisciplinary research

WSTALLET SUMMER SUMMER in medical history. Collaborative research projects continued with the Smithsonian Institution, the National Institutes of Health, the U.S. Department of Agriculture and various colleges and universities.

The museum received funding from the National Science Foundation (NSF) for recovery and analysis during 1989 of organic remains from the University of Colorado archaeologic excavation of El Ceren, El Salvador. Staff will return to the project in 1990 with funds from NSF and National Geographic.

Museum staff presented numerous papers at scientific and scholarly meetings and published numerous articles in the peer-reviewed scientific and scholarly literature.

COLLECTIONS MANAGEMENT

Collections management activities continued over existing collections and in acquisition of major new collections in 1989. The Milton M. Helpen Collection of the New York Medical Examiner Museum was donated to the Museum and the entire collection (N=2000) was transferred here without a single lost or damaged object. The Hans Popper Hepatopathology collection was transferred from Mt. Sinai Medical School. An extensive collection of medical prosthetic devices was transferred from the Hospital for Special Surgery. Comell Medical Center, New York, New York to expand the Museum's standard reference collection of biomedical technology. Numerous additional collections from around the country were assessed and inventoried for transfer during 1990.

ADMINISTRATION

Staff

Orla O'Reilly Administrator
Theresa Strong Administrative Assistant

(D) Rene Pfister, Clerk-Typist
Christopher Pirtle, Clerk-Typist
Trisha Page, Student-Intern
Serita Hewitt, Security Guard

The Museum administration office was established 5 September by transferring the Administrator from the programs office and relocating supporting staff and equipment from G053 to G037. All administrative functions were centralized in this office. Typing AF and ARP contracting, supplies, purchase requests, personnel, safety, security, education, space utilization, communications, transportation and all logistical support are facilitated by the administrative office.

Several exhibit booth outreach efforts were accomplished this year. Locations were selected at national conventions in Washington and staffed by staff and volunteers. These provided an ideal way to promote the museum and establish contacts with a population without prior knowledge of the museum. Booths were at the:

- American Association for World Health Convention: PAHO Building
- -Washington Adventist Hospital Health Fair
- -American Federation of Teachers National Convention: Washington Hilton
- -Georgetown University Health Fair
- -National Convention on AIDS in Minority Populations: Sheraton Washington

Other community groups were supported when the Museum co-sponsored dances and other healthy activities, at the historic Forest Glen Ballroom. Five dances were sponsored as well as a two day dance workshop. Many health-oriented community agencies were sent information about the Museum and offered possibilities for its use for lectures, after hour receptions, and other activities.

The long awaited museum security guard contract was awarded to Hills Capital Security, providing the Museum with security coverage during all public opening hours. As program staff increased their planning and development efforts, less time could be dedicated to interacting directly with the public. Ms. Hewitt has been an invaluable asset to all the staff and volunteers. A new position was recruited but not supported for the front desk. This position is crucial for the Museum.

Several local universities were contacted seeking graduate students for museum work. A University of Maryland public health education student worked with the programs office doing substance abuse prevention research.

Many personnel actions were processed as interns departed and Museum personnel actions updated. The impending hiring freeze left us short staffed due to the length of processing time for recruitments and classifications by CPO. At the end of the year 5 actions were still left uncompleted despite numerous verbal and written requests for updates.

As the Museum continues to expand, the need for adequate staffing and space remain essential. The museum acquired G023 from SID for collections acquisition and management. The space has already been filled by the New York Medical Examiner Museum. The Museum expects 9 more collections within the next year.

ABSTRACTS 1989

- 1. Saul, F.P., <u>Micozzi</u>, M.S. (1989) The identification of fleshed remains: The changing role of the forensic anthropologist (II), American Academy of Forensic Sciences, Las Vegas, NV, p. 118.
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- 4. Fishman, C., Suarez, C., Evans, R., (<u>Micozzi</u>, M.S., presenter) (1989) Growth of Southeast Asia children enrolled in a Los Angeles WIC program. Am J. Phys Anthropol. 78: 220-221.
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- 6. <u>Micozzi</u>, M.S., Miller, P.S. (1990) What is Forensic Anthropology. American Academy of Forensic Sciences, Cincinnati, Ohio.

- 7. <u>Micozzi</u>, M.S. (1990) reliability of self-reported height and weight in the U.S. National Health and Nutrition Examination Survey, Ibid.
- 8. Micozzi, M.S. (1990) Ft. Erie Project: The Authorized Version, Ibid.
- 9. <u>Micozzi</u>, M.S., Garruto, R. (1990) Planning the future of the National Museum of Health and Medicine. American Association of Physical Anthropologists Annual Meeting, Miami, FL.

ARTICLES

- 1. Schatzkin, A.G., Piantadosi, S., Micozzi, M.S., Bartee, D. (1989) Alcohol consumption and breast cancer: A cross-national correlation study. Int. J. Epidemiology 18 (1):28-31.
- 2. Micozzi, M.S., Carter, C. L., Albanes, D.A., Taylor, P.R., Licitra, L.M. (1989) Bowel function and breast cancer in U.S. women. Am. J. Pub. Health 79:73-75.
- 3. Brown, E.D., Micozzi, M.S., Beiri, J., Beecher, G.R., Edwards, B., Rose, A., Smith J.C. (1989) Plasma response to single ingestion of carotenoid-containing vegetables and beta-carotene supplements. A. J. Clinical Nutrition 49: 58-65.
- 4. Micozzi, M.S., and Taylor, P.R. (1989) Carotenodermia and red palm oil. Am. J. Clinical Nutrition 49: 1330-31. (Author's reply).
- 5. Stevens, R.G., Jones, D. Y., Micozzi, M.S., Taylor, P.R. (1989) Body Iron stores and the risk of cancer. New Engl J. Med. 320:1014 (Letter).
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OFFICE OF THE REGISTRAR

MISSION

The mission of the Office of The Registrar for the National Museum of Health and Medicine is to facilitate and maintain registration procedures for incoming and outgoing loan transactions and museum acquisitions.

STAFE

(A) Donna Quist, Registrar
Laurie Carroll, Assistant Registrar

TECHNICAL SUPPORT

The Office of the Registrar was unstaffed throughout 1989 due to ongoing personnel actions.

Outgoing Loans

During the calendar year 1989 the Museum coordinated and negotiated 11 outgoing loan transactions which included 15 anatomical specimens, 8 historical objects, and 241 archival documents and films. Renegotiations were made for several outgoing loans which include the Thomas Eakins painting on display at the National Gallery of Art and a collection of nursing related artifacts being exhibited in the Women's Corridor at the Pentagon in Arlington, VA.

Incoming Loans

The Museum continues to display artifacts on loan from the National Library of Medicine and the Smithsonian Institution in <u>The History of Sexually Transmitted Diseases</u> exhibit.

Acquisitions

The Museum accepted several large and significant acquisitions. The first of which was the Feur Collection of over 135 artifacts representing post World War II medical practices in the United States; the Burnstein Collection consisting of 88 joint prostheses; and the New York Medical Examiner's Collection, a collection of forensic medicine encompassing 144 historical objects, 4100 anatomical specimens and several hundred autopsy records and provenance documentation.

DEPARTMENTAL GOALS

The Office of the Registrar will continue to support the historical, anatomical, and archival divisions of the Museum in an ongoing attempt to obtain a climate controlled environment and adequate storage space for the proper care of the Museum's collections.

ANATOMICAL COLLECTIONS

STAFF

Professional

Paul S. Sledzik, M.S., Collections Manager

- (A) Yvette LeGrande, B.S., Plastination Technician
- (D) Gloria J. y'Edynak, Ph.D., Curator
- (A/D) Allison Webb, Ph.D. Candidate, Museum Technician
- (D) Sean P. Murlphy, B.A., Museum Technician

The anatomical collections of the NMHM began the year with three full-time staff members. During the summer, staff size was increased by one full-time museum technician and a full-time student intern from the DoD Mentor Program. Sean Murphy departed to continue graduate studies in anthropology. Yvette LeGrande was hired through ARP as a plastination technician. Gloria y'Edynak left her position as curator. The assistance of student aides and volunteers in the anatomical collections deserves special recognition.

In 1989, the anatomical collections incurred many changes in staffing, with an overall loss in number of staff by year's end. However, we were able to complete most of the goals set for the year in addition to taking on new collections and responsibilities. As a result, the continual tasks of

collections management increased in scope.

COLLECTIONS MANAGEMENT

The ongoing tasks of collections management included completion of 75% of the Civil War skeletal database, and nearly half of the wet tissue collection. Rehousing of accession records with acid-free paper and folders also continued, with nearly half of the records now in proper storage. A consultant was contracted to review the conservation needs of the anatomical collections. The report cited the current storage and environmental conditions of the skeletal and anatomical preparation collections and provided the staff with a bibliography for further research.

NEW COLLECTIONS

The successful transfer of the Milton Helpern, M.D., New York City Medical Examiner Collection to the NMHM was completed in December. This unique and important collection of anatomical and historical objects and specimens reflects nearly 50 years of collection at the New York City Office of the Chief Medical Examiner. The NMHM/AFIP transferred approximately 1800 wet tissue and 300 skeletal specimens without loss or damage.

The Hans Popper Collection of Hepatopathology was received this year as well as the remaining skeletal specimens of the soldiers from the Snake Hill War of 1812. Transfer of numerous specimens from AFIP was also completed.

PLASTINATION LABORATORY

The NMHM/AFIP Plastination Laboratory was reinitiated in September with the hiring of Yvette LeGrande as plastination technician. Current developments and new techniques in plastination were learned from attendance at the Plastination Laboratory, Mercer University Medical School, and the interim meeting of the International Society for Plastination at the University of Tennessee-Knoxville, College of Veterinary Medicine. Despite some logistical setbacks, necessary equipment for the plastination process was received in October.

LOANS

In 1989, loans of specimens from the collections were made to several institutions. The National Library of Medicine used skeletal specimens for an exhibit on the history of neurosurgery. Several skeletal specimens were loaned to the San Diego Museum of Man for an exhibit on osteopathology. This exhibit was opened for the annual meeting of the American Association of Physical Anthropologists, the Paleopathology Association, and the Human Biology Council. The loan of wet tissue specimens to USUHS was renewed this year, and a bimonthly rotating loan agreement was initiated. A slide set of embryological material was loaned to the Oregon Health Sciences University for use in 3D computer imaging analyses. Several loans of skeletal specimens for research were made to the Smithsonian Institution. We also continued loans of specimens for teaching to AFIP staff.

RESEARCH REQUESTS

The staff of anatomical collections responded to 20 research requests in 1989. These included

regimental history research on two Civil War regiments, 28th Massachusetts and 27th Indiana. Photographs of several specimens for publication in books and articles were supplied to the Arthur Sackler Gallery, Adelphi University, Prentice Hall Publishers, and the National Museum of Natural History. Consultation with AFIP staff for diagnosis of unlabeled gross specimens continued with the assistance of Drs. Selby, Conran, and Popek from the Department of Pediatric Pathology.

EDUCATION

The second annual Forensic Anthropology course was successfully completed in May 1989. This week-long course included speakers from AFIP, Smithsonian Institution, University of South Carolina, and Medical College of Ohio. This year's class of forty included forensic pathologists, medical examiners, law enforcement personnel, anthropologists, and dentists.

FIELD WORK AND OTHER ACTIVITIES

The anatomical collections staff was also involved in archaeological and physical anthropological fieldwork at several sites. Participation in a classic Mayan site in El Ceren, El Salvador, was supported by the National Science Foundation, and involved conservation support. Excavation and analysis of skeletal remains and mummies from San Pedro de Atacama, Chile, continued this year. Locally, the museum staff worked in association with the Smithsonian Institution and the National Park Service in the excavation and analysis of a family bunal ground in Manassas, Virginia.

The anatomical collections were also used in the filming of a public television documentary film on the assassination of President James Garfield and the trial of his assassin, Charles Giteau.

Special tours of the anatomical collections were conducted for several groups including the FBI Scientific Analysis Section and professionals from American University, Florida Atlantic University, and the Smithsonian Institution.

SYMPOSIA

In March, a symposium entitled "Research at Snake Hill: A War of 1812 Cemetery" was held at the Northeastern Anthropological Association meetings in Montreal. Papers by museum staff included the following:

Mann, R.W. and Murphy, S.P.: Skeletal Indicators of Physical Stress in the Fort Erie Soldiers: Schmorl's Depressions, Cortical Defects, and Wedge Vertebrae.

Micozzi, M.S.: The Role of a Medical Museum in Recovery and Analysis of Human Skeletal Remains.

Noe, A.: Medical History and the Fort Erie Project.

Sledzik, P.S. and Moore-Jansen, P.: Dental Pathology of the Snake Hill Soldiers.

In April, Gloria y'Edynak chaired a symposium at the American Association of Physical Anthropology/Dental Anthropology Association annual meetings entitled "Genetic and Environmental Components of Tooth Size and Morphology: Implications for Population Studies".

In November, a symposium entitled "Foundations of American Anthropology: The Army

Medical Museum in Washington, DC" was presented at the American Anthropological Association meetings in Washington. Organized by Paul Sledzik and Gloria y'Edynak, the symposium included the following papers:

Sledzik, P.S.: The Army Medical Museum, the Anthropological Society of Washington, and the American Anthropologist: A Brief History.

Gindhart, P.S.: Dr. Lamb's Legacy.

Schmidt, D.J.: The Smithsonian Institution and the Army Medical Museum: A Cooperative Collecting and Research History.

y'Edynak, G. and Murphy, S.P.: The Skeletal Collections of the Army Medical Museum: Review of Current Research.

Bennett D.W. and Rhode, M.: Anthropological Research in Medical Archives.

Noe, A.: Army Anthropometry: Two Views.

Micozzi, M.S.: The Present and Future of the National Museum of Health and Medicine, Armed Forces Institute of Pathology.

PUBLISHED ABSTRACTS

Sledzik PS. Cutmarks on bone and the instruments that make them. American Journal Physical Anthropology, 78(2):304, 1989.

y'Edynak G. Disease and dimensional compensation during Yugoslav dental reduction. American Journal Physical Anthropology, 78(2):327, 1989.

PUBLISHED ARTICLES

Sledzik, P.S. and Murphy, S.P. Osteopathology at the National Museum of Health and Medicine, Armed Forces Institute of Pathology. British Paleopathology Newsletter, 6:11-14. April, 1989.

PAPERS PRESENTED

15-19 MAR 1989 Northeastern Anthropological Association. Yugoslav Mesolithic-Neolithic Dental Reduction. By G. y'Edynak.

3-7 APR 1989 Paleopathology Association/American Association Physical Anthropologists. Trauma and initial bone response: A study of the time interval. By M.A. Kelley, S.P. Murphy, and P.S.Sledzik.

3-7 APR 1989 Paleopathology Association/American Association Physical Anthropologists. Disease and dimensional compensation during Yugoslav dental reduction. By G. y'Edynak.

15-19 NOV 1989 American Anthropological Association. Interpretation of vertebrae from a military aircraft accident. By S.L. Lawrence and G. y'Edynak.

PUBLIC LECTURES

3 APR 1989 San Diego Museum of Man. Case Studies from the National Museum of Health and

Medicine, Armed Forces Institute of Pathology. By P.S. Sledzik.

1-2 NOV 1989 Forensic Sciences Day/Ohio Embalmers Association, Medical College of Ohio, Toledo, Ohio. The Anatomical Collections of the National Museum of Health and Medicine, Armed Forces Institute of Pathology. By P.S. Sledzik.

VISITING LECTURERS

Dr. Charlotte Roberts, Calvin Wells Laboratory for Burial Archaeology, University of Bradford: "Trauma and Treatment in the British Historic Period". 7 FEB 1989.

Dr. Keith Manchester, Calvin Wells Laboratory for Burial Archaeology, University of Bradford: "Bone Changes in Leprosy: A Clinical, Radiological, and Osteological Consideration". 30 MAR 1989.

Dr. Payson Sheets, Professor, University of Colorado: "Biomedical Research at El Ceren, A Classic Mayan Archaeological Site in El Salvador". 27 MAY 1989.

Mr. William Mulder, Curator, Leiden Anatomical Museum: "16th Century Dutch Anatomical Collections". 18 SEP 1989.

Dr. Yasar Iscan, Professor, Department of Anthropology, Florida Atlantic University: "Research Strategies in Forensic Anthropology". 17 NOV 1989.

HISTORICAL COLLECTIONS

STAFF

Adrienne Noe, Curator and Assistant Director, Museum Alan Hawk, Collections Manager

(D) Matthew Burke, Student Intern Sol Pargament, Volunteer

MISSION

Historical Collections is responsible for the acquisition, preservation, and research of artifacts documenting the scientific, social and institutional history of medicine and the evolution of medical and related technologies. The collection is made available to medical professionals, historians, and the general public through exhibits in the museum, loans to other sites, individualized study, and publications.

CONSULTATION

The division responded to 75 written and telephone inquiries about its holdings and related matters. Staff provided professional consultations to several museums and galleries, including the Robb House Medical Museum in Gainsville, Florida, and the Cape Medical Museum of the Repub-

lic of South Africa. Adrianne Noe and Alan Hawk were selected as consultants to the Stonestreet Medical Museum in Rockville, Maryland, by the Montgomery County Historical Society to evaluate their collections management plans to be funded by the National Endowment for the Humanities.

RESEARCH

The division staff provided artifact and research support for numerous museum exhibits, including those of bloodletting and medicinal leeches, Civil War medical instruments, the medical response to AIDS, transportation of the wounded, wax models, and the fluorescence activated cell sorter. In addition to the research required in support of staff and outside inquiries, division staff provided background research for numerous collections offered to the museum as potential acquisitions, for international film projects on the history of medicine, and for several planned exhibits. Staff also served on a National Institute of Mental Health panel(D) Matthew Burke, Student Intern to discuss and implement the development of a national mental health and psychiatry historical archive and museum, and on the National AIDS History Research Group.

COLLECTIONS MANAGEMENT

The staff completed a computerized inventory of 7,729 artifacts in storage areas and on exhibit. The computerized list on DBASE provides timely and precise information on the location of approximately 80 per cent of the historical collections. Artifacts are listed by catalog and accession numbers and are classified according to the National Library of Medicine's Medical Subject Heading scheme. A second phase of the collections management process began by refining the initial computerized catalog. More detailed and thoroughly researched artifact descriptions are included for approximately seven percent of the collections, including all new accessions and loaned or exhibited items. The installation of ten museum storage cases completed a major portion of the main collections management storage area, which uses 44 cabinets to store 5,390 artifacts ranging from syringes to surgical kits.

Four hundred eighty-two artifacts were donated to the collections in 1989. The major collections include the Milton M. Helpem, M.D., New York City Medical Examiner Collection of artifacts relating to the Office's activities and documenting forensic medical techniques; the Hospital for Special Surgery Orthopedic Reference Collection, which includes numerous new and retrieved joint prostheses; and the Feuer collection of 135 artifacts documenting the practice of a midtwentieth century physician.

Numerous artifacts were loaned to other institutions for exhibition.

PUBLICATIONS, PRESENTATIONS, AND EDUCATION

Staff participated in several formal and informal meetings relating to the activities of the collections and the museum: meetings of the Royal Microscopical Society, the Maryland Microscopical Society, the American Association for the History of Medicine, the Medical Museums Association, the Society for the History of Technology, the Washington Society for the History of Medicine, and the Society for History in the Federal Government.

Presentations and publications

15 February 1989. North East Anthropological Association: Fort Erie, A Medicohistorical Report

by A. Noe, presented by P. Sledzik.

20 March 1989. National AIDS History Workshop: AIDS and the National Museum of Health and Medicine, by A. Noe.

2 May 1989. Medical Museums Association: Report to the President, by A. Noe presented by A. Hawk.

9 May 1989. Aerospace Medical Association: History and the Association, by A. Noe.

19 November 1989. American Anthropological Association: Army Anthropometry, Two Views, in a session entitled "Foundations of American Anthropology: The Army Medical Museum in Washington, DC," by A. Noe.

Hawk, Alan: Book Review, A Medic's War by Albert Cowdrey. Public Historian, forthcoming.

Noe, Adrianne: Early Aeromedical Research at the Aerospace Medical Research Laboratory. Aviation, Space, and Environmental Medicine, forthcoming.

Noe, Adrianne: Fort Erie, A Medicohistorical Report. In Report on the Snake Hill Site, edited by R. Williamson, forthcoming.

A series of articles on the dermatological models in the collection appears regularly in the International Journal of Dermatology, by Lawrence Charles Parish, M.D. and A. Noe.

OTIS HISTORICAL ARCHIVES

The Otis Historical Archives began the year with two new staff members: Robert Montgomery, Archives Technician and Michael Rhode, Archivist, who replaced Daniel Bennett. In a museum reorganization, the OHA assumed the role of a collecting division.

The OHA received a total of 199 extramural research requests and responded to extensive additional AFIP and NMHM requests. It received 77 telephone requests for information and 82 mailed requests. Forty visitors completed in-depth research on the premises, frequently over several days. The Vorwald Collection of materials on industrial medicine was especially active due to continuing abestos-related litigation.

The OHA accessioned several major collections into its holdings during the year. It received the Montgomery Collection of materials relating to physical therapy and nursing, the Terry audiotape collection of Dr. Lent Johnson's medical lectures, and the United States Army Veterinary Corps Archives, which included two book collections—the Dildine and the Owens. It also added the Pearse Collection of World War I material, the Pediatric Pathology videotape collection, an assortment of WRAMC videotapes, the Kavruk intelligence testing and industrial psychology collection, the fetal pathology photographic collection from the AFIP Department of Pediatric Pathology, bibliographic materials from the Fort Meyer Museum, the Torp film collection on physical therapy and materials from the New York Medical Examiner's Office. OHA has continued assembling collections of materials researched at the NMHM, such as manuscripts, published documents, and documentary films.

OHA staff intensified the continuing project to produce a computenzed inventory, and description of the OHA collections. During the year, over 6130 photographs were entered into a database and six other collections were fully described. This resulted in a total of 13 new finding aids, which are available to researchers and other institutions.

Several special projects were initiated. The Army Medical Museum collection of glass plate negatives dating from the Spanish American War in 1898 is being printed by a private contractor. This contractor also printed portraits of prominent Washington medical professionals from the Woodward glass negative collection, which date from the Civil War. Neither collection had been printed since the photographs were taken. Conservation surveys were commissioned for some of the museum's oil paintings and the recommendations of the conservator are currently under advisement. A project to survey and describe the OHA film collection is under way and the films and inventory will begin to serve as an active complement to the collection at the National Library of Medicine.

At the American Anthropological Association meeting on November 19, 1989, Michael Rhode presented "Anthropological Research in Medical Archives" by Daniel Bennett and Michael Rhode in a session entitled "Foundations of American Anthropology: The Army Medical Museum in Washington, DC."

EXHIBITS DIVISION

The Exhibits Division is responsible for all exhibits and graphics support for the National Museum of Health and Medicine, and includes two staff members: Douglas Landry, Visual Information Specialist, and Richard Rapoza, Exhibit Specialist. In 1989, the division produced and installed ten new exhibits, including several additions to the AIDS Exhibition. As of December 31, 1989, the exhibits staff has seven other exhibits well under way, including plans for refurbishing and remounting older cases utilizing more current conservation technologies. In addition, the division has produced posters, slides, and illustrations in support of staff professional activities, as well as providing interior designs for the future museum.

The exhibit staff participated in international meetings and gatherings of museum leaders to discuss exhibition ideas and philosophies. The staff also collects and maintains a slide library of national and international museums as a planning reference of various exhibit styles and visual information technologies.

The exhibit staff makes provisions for the safe shipping of all museum artifacts and was responsible for the design and construction of shipping cases and transportation of over 2,200 artifacts from the New York Medical Examiner's museum. As of December, the division began plans for the installation of the AIDS Exhibition in the Health and Human Services building located near the Mall in Washington, D.C.

DIVISION OF MUSEUM PROGRAMS, JULY THROUGH DECEMBER, 1989

For the first half of 1989 the Division of Museum Programs was under the aegis of the Museum Programs Administrator, whose report appears under separate cover. This report lists additional activities undertaken during that period, and provides descriptions of plans, programs and activities for the remainder of the year.

Contacts were established or expanded with, or consultationwas provided to, the following individuals, groups or museums:

Foundation for Health Education re: substance abuse prevention

Association of Science and Technology Centers re: possibility of an AIDS traveling exhibit

New York Hall of Science

Jean-Michel Tobelem, visiting French museologist

Food and Drug Administration

Science Center, Davis, California

American Red Cross re: transplantation exhibit

National Institute of Allergy and Infectious Diseases (NIH)

Weller Health Education Center (Easton, PA)

Pan American Health Organization

Department of Health and Human Services

Maryland Science Center (Baltimore, MD.)

Roper Mountain Science Center, Greenville, SC

Whitman-Walker Clinic re: AIDS education

D.C. and Montgomery County Public Schools re: AIDS education

Project Hope re: AIDS education

Smithsonian Institution Resident Associates Program

Smithsonian Institution Anacostia Neighborhood Museum

Smithsonian Institution National Museum of American History

American College of Preventive Medicine

University of the District of Columbia re: Career Day participation in program for summer youth

National Library of Medicine

D.C. Council on the Humanities

WRAMC Health Promotion Program - participation in WRAMC Health Fair

Metropolitan area volunteer bureaus

D.C. Councilmember Charlene Drew Jarvis

W.J. Mulder, Medical Museum, Leiden, Netherlands

Drs. Wolffs and Janssen, Dutch National Health Education Center Project, Rotterdam, **Netherlands**

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Washington Museums Collaborative

Museum Store Association

In June, Dick Levinson was hired (ARP) through a grant from the College of American Pathologists as a part-time consultant to begin work on the upgrading of the Museum exhibit on Autopsy, and on a brochure to accompany the exhibit. On October 1, he became a full time ARP Education Specialist in the Museum. Sheila Pinsker, who had occupied that position for the preceding fiscal year became the Curator of Education. Staff of the Programs Office presently consists of these

two full time personnel employed through contractual arrangement with ARP, and one half time GS-05 Tour Coordinator.

Volunteers help to fill some important gaps in the Programs Office, e.g., serving to staff the lobby information desk, but this solution is not adequate and will be addressed in the section of recommendations for the future.

Volunteers also continue to serve as docents (museum teacher/guides) and as helpers with other work such as cataloging of collections. A small group of new weekday docents was trained during February and March.

During 1989, 29 volunteers served a total of 2,689.5 hours in the Museum. They led 158 tours with a total of 4,694 people in them, and participated in a number of special events, including the Smithsonian Resident Associate night and the opening of the Headache Art exhibit.

- 21,840 walk-ins
- 3,237 participants in special events, such as users of Russell auditorium, attendees at receptions and summer programs, and people reached through outreach efforts at conventions, etc.

Exploration of mutual interests about substance abuse prevention was begun with The Foundation for Health Education (FHE), a community group with 501 (C) 3 status (tax-exempt, non-profit). As a result, a collaborative effort to work cooperatively on a Museum Substance Abuse Prevention Exhibition has been agreed upon. Members of the FHE team introduced the Museum Director and Curator of Education to the Weller Health Education Center in Easton, PA, where a functioning substance abuse prevention exhibit has been in use for the past several years. Some of these exhibit elements will be used for the Museum program, and new conceptual programmatic and design elements will be introduced. When funding for the exhibition plan was provided through AFIP using end of year DOD monies, FHE agreed to provide funds for the teacher/health educator who will work in the program, and to provide informational and logistical support for exhibit creation.

The Museum is also working cooperatively with the Office for Substance Abuse Prevention (OSAP) of the Alcohol, Drug Abuse, and Mental Health Administration of the U.S. Department of Health and Human Services. A Memorandum of Understanding has been signed between OSAP and AFIP: this permits use of the end-of-year funding through an inter-agency transfer of monies. OSAP, money in hand, will now put out a request for contracts, and will oversee the letting of these contracts for design, fabrication, and installation of the exhibit, which will serve youth, teenagers, adults, and families, both military and civilian.

Other collaborative efforts included extensive work with the National Park Service, as they prepared to commemorate the 125th anniversary of the Battle of Fort Stevens. Russell auditorium was the scene of six lectures provided for the public, with a Progams Office staff member serving as the first lecturer. The Museum also became part of a Park Service bus loop which brought tourists to various participating sites, and provided special tours for Civil War reenactors as well. A special exhibit was created and placed in the large street window of the Blair-Lee Building on Georgia Avenue and Colesville Road, promoting the Museum's participation in the Fort Stevens

Anniversary.

On October 8, the Museum installed its first major loan exhibit: Headache Art, sponsored by Sandoz Pharmaceuticals. The sponsorship also included a press preview at the National Press Club, with Dr. C. Everett Koop speaking on the Museum's behalf; a gala opening night reception in the useum, and provision of educational materials about headache for Museum visitors. The exhibit remained open until January 24, 1990, and has paved the way for exploration of ongoing cooperative efforts between the Museum and BBK, the Boston public relations firm which handled the Sandoz exhibit and which represents other companies which may be interested in working with us on health and medically related education and exhibit efforts.

A major collaborative project began with the Department of Human Services, Office of Disease Prevention and Health Promotion: Health Objectives for the Year 2000. We served at workshop sessions to help critique the objectives, and began planning for possible use of the Museum AIDS exhibit and other teaser exhibits which could be installed in the lobby of the HHS building opposite the Mall in conjunction with the launching of the Year 2000 objectives programs.

Public relations efforts resulted in contacts with TV stations planning future programs with possible museum involvement (e.g., Nippon TV about our Japanese mannequins), and publication of stones, articles and reviews in such publications as the Washington Post, New Physician Magazine, and Science World.

A staff member was invited to serve on the board of Directors of the Consumer Health Information Research Institute, on the Program Committee of the Museum Education Roundtable, and as a member of the Metropolitan Area AIDS Educators.

Future plans include upgrading of the AIDS education exhibition and the Autopsy exhibit; production of brochures about both of these; production of a new museum brochure; exhibits on substance abuse prevention, transplantation, and Lyme Disease; new loan exhibits; training of new docents to expand tour services; and continued collaborative efforts to promote the museum's concepts, goals, and national status.

In order to meet these objectives, additional staff are required to provide:

- Education components as part of all exhibit planning, execution, and utilization
- Education components as part of all publication and media efforts of the Museum
- More extensive and in-depth training and supervision of the docent and other volunteer programs

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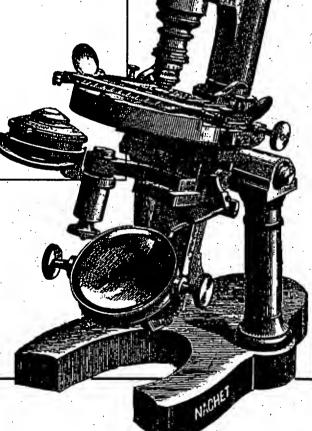
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- Full time coverage by paid personnel of the Museulm lobby information desk

ANNUAL REPORT

ARMED FORCES INSTITUTE OF PATHOLOGY WASHINGTON, D.C. 20306-6000

1990





NATIONAL MUSEUM OF HEALTH AND MEDICINE OF THE AFIP

Marc S. Micozzi, M.D., Ph.D. Director Date of Appointment - June 1986

MISSION

To further public and professional understanding of human health and progress against disease.

ORGANIZATION

In December 1988, the AFIP Board of Governors changed the official designation of the Museum from the "Medical Museum of the Armed Forces Institute of Pathology" to the "National Museum of Health and Medicine of the AFIP." In June 1989, the National Museum of Health and Medicine Foundation, Inc., was chartered in the District of Columbia as a private, nonprofit, tax-exempt organization to work in partnership with AFIP and the ARP in the development of new museum programs and facilities. This work is undertaken as a public-private mutual cooperative effort under Public Law 94-361, Sections 176 and 177.

The Foundation has no employees. It works with a number of consultants and primarily volunteers, including a 27-member Board of Trustees chaired by former Surgeon General C. Everett Koop, a large National Advisory Council, and 24 active museum volunteers and docents. The staff of the National Museum of Health and Medicine of the AFIP operates all museum programs and facilities.

The Museum consists of the Office of the Director and the following divisions:

Division of Collections and Research Division of Education and Exhibits Division of Operations and Administration

OFFICE OF THE DIRECTOR

STAFF

Marc S. Micozzi, M.D., Ph.D., Director James Damato, COL, MS, USA, Executive Administrator Orla O'Reilly, Project Officer Theresa Strong, Secretary Rosa McCoy, Clerk-Typist Tricia Paige, Student Intern **Exhibits: Douglas Landry**

Richard Rapoza

Community Relations: Richard Levinson Volunteer/Tour Program: Jeanne Levin

The Museum restructured its administrative functions and responsibilities to reflect new and expanding missions. This organization has allowed for better centralization of administrative functions and logistical support as well as enabling closer working relations between the Museum, the Foundation, and the AFIP.

This was the first year that the Foundation worked directly with museum staff and funded several programs. The Foundation's activities are reported separately in an effort to illustrate this relationship and how it has helped the museum's public programs.

DIVISION OF COLLECTIONS AND RESEARCH STAFF



Adrianne Noe, Ph.D., Assistant Director, NMHM, for Collections and Research
Laurie Carroll, M.A., Collections Manager

The newly established Division of Collections and Research includes all museum collections and related activities and their staffs: Anatomical, Historical, the Otis Historical Archives, and the Office of the Registrar. Reports for each of these units follow. The division also provides management, direction, and implementation of interdisciplinary Museum-wide collecting and research activities. In 1990, this has included the coordinated initial work and acquisition of several large research collections: the Camegie Human Embryological Collection from the California Regional Primate Research Center at Davis, CA; documentation for the Milton Helpern, M.D., Forensic Collection; and the Lindenberg Neuropathology Collection from the Office of the Chief Medical Examiner at Baltimore, MD. In addition, general automated accessions policies have been implemented and new off-site collections management areas established.

HISTORICAL COLLECTIONS

STAFF

Adrianne Noe, Curator
Alan Hawk, Collections Manager
Sol Pargament, Docent/Volunteer

(A) Matthew Ake, Volunteer

Historical Collections is responsible for the acquisition and preservation of artifacts documenting the history of medicine, the evolution of medical technology, and contemporary medical activities. The collection, which was started in 1864, is made available for the education of medical professionals, historians, and the public through exhibits in the Museum, loans to other institutions, and individualized study and research. Goals include the continued extensive cataloging tasks attendant to managing a growing documentary collection, furthering the role of the Institute as a national repository of biomedical inventions and innovations, and the dissemination of related information by catalogs, exhibitions, publications, and researcher access.

COLLECTIONS MANAGEMENT

Computerized inventory of artifacts stored in Hammond Hall, the microscope storage area, Siliphant Hall, off-site storage and the exhibit halls now include 8,542 artifacts, approximately 85% of historical collections. The artifacts included are listed by catalog number, accession number, classification based on the Medical Subject Headings Index generated by the National Library of Medicine, object name, and location.

The historical collections computer catalog, which differs from the basic inventory by containing a far more detailed description of each artifact, now includes 1,954 artifacts, approximately 20% of the collection. The 1,265 items cataloged in 1990 include new accessions, previously accessioned artifacts, and artifacts on loan and were processed with the assistance of volunteers to the collection. Portions of historical collections completely cataloged on the computer include the artificial limb collection, the stethoscope collection, the endoscope collection, the condom collection, and The Hospital for Special Surgery Prosthesis Collection. This cataloging system allows for quick access not only to the artifacts themselves but to information about them, in turn supporting research and exhibition goals. Appropriate environmentally controlled storage conditions have been secured for much of the collection.

ACQUISITIONS

Eight hundred ninety-eight artifacts were donated to Historical Collections in 1990. Some of the major additions to the collections include The Hospital for Special Surgery Collection, 64 prosthetic devices documenting the development of knee, hip, femoral, and finger prostheses and their various size ranges; the Martin Collection, 311 artifacts documenting a mid-20th century rural ophthalmology practice; 17 artifacts documenting the history of the United States Public Health Service; 3 examples of the first female condom; two 18th-century burial shrouds; the iron coffin and burial clothing of a Confederate soldier; and several significant new additions complementing the radiology collection, including a shoe fluoroscope.

LOANS

Fifty-two artifacts were loaned to other institutions for exhibition. Historical Collections supported exhibits at the Walter Reed Army Medical Center in honor of National Nurses' Week and National Respiratory Therapy Week, as well as the WRAMC Combined Federal Campaign.

CONSERVATION

In conjunction with the staff of the Conservation Analytical Laboratory of the Smithsonian Institution, Historical Collections staff participated in the conservation of fragile burial garments wom by

Walter Weir (see references in the report of the Anatomical Collections). It also facilitated work on an 18th-century microscope and the life mask of Abraham Lincoln.

RESEARCH

Historical Collections staff responded to over 150 walk-in, telephone, and written inquiries about items in the collections and the subject matters they represent. These inquiries came from Institute staff, medical and health care professionals, scholars, other museum professionals, and the general public.

Publications include Hawk, Alan: "Book Review, <u>A Medic's War</u>, by Albert Cowdrey," <u>The Public Historian</u>, Fall 1990, pp 102-104; Noe, Adrianne: "Medical Collecting and the History of Museums," <u>Journal of the History of Collections</u>, forthcoming; and Noe, Adrianne, "Retrieving the Fallen Soldier: Medical History, Military Mission, and Snake Hill," <u>Caduceus</u>, forthcoming, Spring 1991. The staff also contributed to a series of articles in the medical literature about its dermatological models.

The staff provided professional museum consultations to institutions and individuals in Carlisle, PA; San Antonio, TX; Baltimore, MD; New York, NY; Wilmington, DE; and London, England. Consultations and other kinds of assistance were provided to the Mutter Museum of the College of Physicians of Philadelphia, the Smithsonian Institution, the Medical Museums Association, the American Association of Museums, the Hood Museum of Art at Dartmouth College, and numerous other institutions.

The staff provided in-house educational opportunities by curating or participating in mounting and researching numerous exhibits at the Museum. Alan Hawk offered a docent training program based on the Billings Microscope Collection on 1 December 1990.

OTHER ACTIVITIES

Thirty-five items from historical collections were featured in the Harvard Internal Medicine series for continuing medical education on Lifetime Television. These objects, including some of the most visually interesting artifacts in the collection such as the Heine osteotome, the 18th-century Marshall microscope, and a gold-plated cystoscope will be featured in the opening and closing scenes of the 120-segment Alpha Telecommunications production. The staff also facilitated numerous in-house research requests, participated in many multidivisional museum activities, and continued to serve as officers and active participants in national and international professional organizations as representatives of the Institute and the Museum.

ANATOMICAL COLLECTIONS





Paul S. Sledzik, M.S., Curator Yvette LeGrande, B.S., Plastination Technician Allison Webb Willcox, M.A., Collections Manager (A) Donna March, Student Intern

COLLECTIONS MANAGEMENT

Collections management activities proceeded with volunteer and student intern assistance despite the lack of a collections manager. Volunteers aided in the inventory and cataloging of the Milton Helpern, M.D., New York City Medical Examiner Collection and the Indian War skeletal collection. Under the DoD Mentor Program, cataloging of the Civil War skeletal collection continued and is now 85% complete. We were fortunate to receive volunteer assistance from Dr. Therese Bocklage, University of Vermont, and Ms. Juliet Cleaves, University of Maryland, for three months. Dr. Bocklage cataloged the Gibson skeletal pathology collection, conducted research in paleopathology, and assisted the staff in pathological diagnosis of specimens. We also received volunteer assistance from Ms. Sarah Breitweser, Ms. Lisa Dunbar, and Mr. Aamir Shiekh.

ACQUISITIONS

In 1990, the Anatomical Collections acquired the Princeton University Comparative Veterinary Collection. Several skeletal specimens were donated from institutions or individuals. In addition, several AFIP departments transferred collections and specimens to the division. Work continued on acquiring several other collections and locating documentation on recently accessioned collections. Two trips were made to Utah State University to assess and inventory the Dr. James L. Shupe Veterinary Flourosis Collection.

PLASTINATION LABORATORY

The NMHM/AFIP Plastination Laboratory marked great advances in 1990. Equipment purchases were completed and necessary modifications made. Two process runs were made during the year to help correct processing problems. Dr. Robert W. Henry of the University of Tennessee visited the laboratory and provided invaluable technical advice. In addition, an agreement was made between USUHS and the Plastination Laboratory for the acquisition of specimens for plastination.

LOANS

In 1990, specimens were loaned to numerous AFIP staff members, the Respiratory Therapy Section of WRAMC, and the Oregon Health Sciences University. The loan program with the Department of Pathology at the Uniformed Services University of the Health Services continued.

RESEARCH REQUESTS

Research requests included telephone inquiries, written requests, and use of the collections by researchers. In 1990, the anatomical collection answered nearly 75 telephone inquiries and 50 written requests for information. Nearly 100 researchers visited the collections for a variety of reasons, ranging from tours to scientific study of museum specimens. The topics researched included Civil War medicine, skeletal pathology, neurosurgery, forensic pathology, pediatric pathology, paleopathology, forensic anthropology, and veterinary pathology. Institutions requesting Information or visiting the collections included the University of Kentucky, the University of Illinois, the Smithsonian Institution, the National Archives, West Penn Hospital, the University of Hawaii, the Denver Museum of Natural History, Texas A&M University, the Yale School of Medicine, the Los Angeles Museum of Natural History, Case Westem Reserve Northside Medical Center, the Israel Antiquity Authority, and the British Embassy.

The Third Annual Forensic Anthropology course was completed in 1990 with outstanding participant evaluations. The 35 participants this year included medical examiners, coroners, forensic dentists, and law enforcement personnel. Faculty included Dr. William Bass of the University of Tennessee, Dr. Douglas Ublelaker of the Smithsonian Institution, and Dr. Frank Saul of the Medical College of Ohio and member of the AFIP Scientific Advisory Board. A manual was also produced for the 1990 course. In addition, the Forensic Anthropology course was selected by the AFIP Education Division as the model course for ACCME reaccreditation.

OTHER ACTIVITIES

Staff research at the NMHM/AFIP in 1990 continued in the areas of forensic anthropology, skeletal pathology, and paleopathology. In particular, this research included examination of Civil War skeletal specimens to qualify bone healing and infection; research on 19th-century military dental disease; anthropological analyses of trophy skulls from the Vietnam War, and determining the temporal viability of tuberculosis.

Of particular interest was the study of skeletal remains from a Confederate Civil War veteran. The soldier, a Manassas, VA landowner, died and was buried in an iron coffin in 1870. The coffin was opened in 1990 at the AFIP. Skeletal samples are being analyzed for evidence of DNA, antibodies, blood type, and biochemical remnants. Also, samples are being analyzed for evidence of changes in the nucleic acids that were present at discovery and at the opening. Many AFIP staff members participated in this project.

The anatomical collections were featured in a program on dental health produced by the Office of Television Resources of the Prince George's County (MD) Public Schools. Public Television's <u>American Experience</u> series highlighted the gross pathology collection during a program on the assassination of President Garfield.

The staff is working with Diane France of France Casting to create a series of skeletal pathology casts. These casts will be made from skeletal specimens and sold through France Casting. Series reflecting the strengths of the skeletal pathology collection (trauma, treponemal infection, tuberculosis, fracture healing, etc.) are planned.

PUBLICATIONS

Abstracts

- 1. Micozzi, MS, Miller, PS (1990) What is Forensic Anthropology? American Academy of Forensic Sciences, Cincinnati, Ohio.
- 2. Micozzi, MS (1990) Reliability of self-reported height and weight in the U.S. National Health and Nutrition Examination Survey, Ibid.
- 3. Micozzi, MS (1990) FT Erie Project: The Authorized Version, Ibid.
- Micozzi, MS, Garruto, R (1990) Planning the Future of the National Museum of Health and Medicine. American Association of Physical Anthropologists Annual Meeting, Miami, FL, p. 182.
- 5. Micozzi, MS (1990) Status Report on the National Museum of Health and Medicine. Luncheon Address. Medical Museums Association. American Association for the History of

- Medicine, Baltimore, MD, May 12, 1990.
- Micozzi, MS (1990) Chair, Panel on Health and Medicine, Conference on Aging with Independence: Technologies for the New Century, Alliance for Aging Research, Orlando, FL, October 10, 1990.
- 7. Micozzi, MS (1990) Anthropology in Cancer Prevention and Control. Invited Session on Health and Disease: Anthropologists Address the Human Condition. American Anthropological Association Annual Meeting, New Orleans, LA.
- 8. Micozzi, MS (1990) Discussant. Occupational Injunes and Diseases in the American Workplace: Anthropological Perspectives, Ibid.

Articles

- 1. Mann, R.W., Owsley, D.W., Sledzik, P.S. Seronegative Spondyloarthropathy of the Foot. Journal American Podiatric Medical Association, 80(7):395-396, 1990.
- 2. Mann, R.W., Sledzik, P.S., Owsley, D.W., and Droulette, M.R. Radiographic Examination of Chinese Foot Binding. Journal American Podiatric Medical Association, 80(8):405-409, 1990.
- 3. Micozzi, M.S., Beecher, G.R., Taylor, P.R., Khachik, F. (1990) Carotenoid analyses of selected raw and cooked foods associated with a lower risk for cancer. Journal of the National Cancer Institute 82: 282-285.
- 4. Micozzi, M.S., Harris, T.M. (1990) Age variations in the relation of body mass indices to estimates of body fat and muscle mass. American Journal of Physical Anthropology 81: 375-379.
- 5. Kurent, H.P., Micozzi, M.S. (1990) To nurture a nation's health: The ambitious plan for a museum of medicine, <u>Washington Post</u>, July 1, 1990, p. B8.
- 6. Micozzi, M.S. (1990) Applications of anthropometric techniques to epidemiologic studies of diet and cancer, American Journal of Human Biology 2: 727-739.
- 7. Micozzi, M.S., Townsend F., Koop, C.E. (1990) From Army Medical Museum to National Museum of Health and Medicine: A Century-Old Institution on the Move. Archives of Pathology and Laboratory Medicine 114: 1290-1295.

PAPERS PRESENTED

- 19-23 FEB 1990 American Academy of Forensic Sciences. Souvenirs, anyone?: Analysis of six trophy skulls from the Vietnam War. By P.S. Sledzik and S.W. Ousley.
- 19-23 FEB 1990 American Academy of Forensic Sciences. Bone response to trauma: The first six months. By S.M. Murphy, P.S. Sledzik, R.W. Mann, and M.A. Kelley.
- 4-7 APR 1990 Paleopathology Association/American Association of Physical Anthropologists. Bone Remodeling Following Trauma (Roundtable). By P.S. Sledzik and S.P. Murphy.

OFFICE OF THE REGISTRAR



STAFF

Donna Quist, Registrar

MISSION

The mission of the Office of the Registrar for the National Museum of Health and Medicine, AFIP, is to facilitate and maintain procedures and records for museum acquisitions and loans.

TECHNICAL SUPPORT

Outgoing Loans

During the calendar year 1990, the Office of the Registrar coordinated and negotiated 33 outgoing loans. The Chicago Historical Society borrowed several museum objects to be displayed in an exhibit titled "A City Comes of Age: Chicago in the 1890s." The AFIP painting of Dr. John Hill Brinton by Thomas Eakins is currently on display at the National Gallery of Art, Washington, DC. Negotiations and arrangements were made for the transportation of the Museum's mummy exhibit to be displayed for the "World Congress of Mummy Studies," Museo Arqueologico y Etnografico, Canary Islands, Spain. Several pieces of burial clothing from the Walter Wier accession were loaned to the Smithsonian's Conservation Laboratories for research and conservation.

Incoming Loans

Seven incoming loans were coordinated for the Museum during 1990. The "Afro-American Physicians Exhibit" was on loan and exhibited during "Black History Month." Thirty-one anatomical specimens were borrowed from the Anthropology Department of the Natural History Museum, Smithsonian Institute, Washington, DC., to support the Forensic Pathology Course held at the Museum in June 1990.

Acquisitions

The Museum accessioned several large and historically significant collections during 1990, including six plastinated human specimens purchased from Dr. Gunther Von Hagen of the Anatomitishches Institute Universitat Heidelberg, West Germany. A Cadet Nurse Corps' flag of the United Stated Public Health Service, circa 1940s, was donated to the Museum during a formal presentation held in Russell Auditorium in May; the DiLorenzo Collection consisting of historical and archival materials was donated in June; the Hans Popper Collection was received from Mt. Sinai Hospital, NY, in the spring; the Rimnac Collection consisting of "state of the art" prosthetic deceives was received in June; and the acquisition of the Walter Wier burial clothing and iron coffin, circa 1865, was completed in March.

The NMHM of the AFIP Acquisition Committee held its first meeting in May. Decisions and recommendations were reached on several acquisitions and deaccessions of AFIP and NMHM collections. The Camegie Human Embryological Collection was overwhelmingly approved for acquisition. It was agreed to return three Pawnee Indian crania for repatriation. The committee made decisions on several requests for destructive testing and are at present evaluating the scientific and historic significance of more specific requests.

Ongoing Activities

The Office of Registrar has established several procedures and systems to organize and maintain accession and loan records and material. Requirements have been established for the packing and transportation of large and significant collections. A computerized data system was designed to facilitate the reconciliation of accession material and to provide a uniform pattern of data entry for current museum accessions. Procedures for the reconciliation of accession material were established in order to maintain accountability and documentation on accessioned objects.

DEPARTMENTAL GOALS

It is the goal of this office to continue to facilitate and support the acquisition and loan programs of the National Museum of Health and Medicine, AFIP. Continued emphasis will be placed on environmentally safe and secure collection storage areas with the purchase of state-of-the-art environmental monitoring equipment.



OTIS HISTORICAL ARCHIVES

STAFF

Michael Rhode, Archivist

- (D) Robert Montgomery, Archivist Technician
- (A) Council Nedd, Student Intem

The Otis Historical Archives (OHA) received a total of 226 requests for information this year, not including Medical Museum and AFIP requests or referrals to other institutions. Users included the National Museum of Natural History, American Heritage Magazine, National Geographic Magazine, the Indiana Medical History Museum, the US Holocaust Memorial Museum, Texas Parks and Wildlife Department, and the National Park Service. An image of neurofibromatosis provided by the OHA was used on the CBS evening news program on 12 July 1990, and Council Nedd made a brief appearance in Confiscated Atomic Bomb Film produced by TV Tokyo. Photographs from the OHA were used by Ken Burns in his popular PBS series The Civil War. Photographs and articles describing the effect of mustard gas were provided to the Department of Environmental Pathology of the AFIP for use in Operation Desert Shield. The archives had 100 visitors in 1990 for tours, indepth research, or professional discussions. The Vorwald Collection continued to remain popular because of asbestos litigation; it was also used by professional industrial medicine historians.

Collecting specifically archival material continued this year; most larger collections accessioned by the Museum had an archival component as well. One hundred linear feet were added to the Archives for a total of 1,800 linear feet of collections; this compares to a total of 200 linear feet in 1980, for a growth of 900% in a decade. Among the larger collections were medical and pathological books donated by Drs. David and Joyce Orrahood. Prof. William Laughlin of the University of Connecticut donated the papers of his colleague, Dr. Morris Steggerda, which contain anthropometric data on various populations, including Navajo Indians, Jamaicans, and Mayan Indians. The family of Dr. Perry Melnick donated his work on histology, much of which was done in cooperation with the AFIP. The National Library of Medicine's History of Medicine Division began transferring duplicate or unwanted medical images to the Museum in the fall. Many of these photographs had originally belonged to the AFIP and are being returned to the Reeve photographic collection.

The computerized inventory and finding aid project, which was begun in 1989, continued. The Vorwald Collection is now inventoried by number, patient name, diagnosis, and company worked for, leading to easy retrieval of records for attorney and pathologists requests. Ilan Haber, a DoD Science & Engineering Apprentice Program student, compiled a database of museum correspondence from 1894 until 1896, which included many letters from Walter Reed. Most of the Army Medical Museum photographic collections dating from 1862-1916 have been described at the item level, and World War I and World War II era collections are now being reviewed. Laurie Carroll arranged and described the archival component of the James Moore Ball Ophthalmic Museum Collection, which had been in storage since it was accepted in the mid-1920s.

Another major arrangement and description project that was completed was the General Medical Product Information Collection, which contains catalogs and brochures on medical equipment from the mid-19th century until the present. A combination shelf list and inventory of the archives is continuing, with 90 collections added this year. It is anticipated that this project will serve as a basis for a 'guide' to the OHA collections.

The OHA provided information on its holdings to several national databases, including the *Inventory* of *American Painting before 1917* of the National Museum of American Art, the Catalog of *American Portraits* of the National Portrait Gallery, the *National Inventory* of *Documentary Sources in the US* (a microfilm publication), the *Directory of Archives and Manuscript Repositories in the US*, and DIRLINE of the National Library of Medicine's MEDLARS system.

In June, a column describing some of the OHA collections was begun in the AFIP Letter. Collections covered this year were contributed photographs, the McGee Collection, the Vorwald Collection, and surgical photographs. Exhibit support was provided for the exhibit on black Civil War soldiers and the new introductory case in the Billings Microscope Collection exhibit. Mr. Rhode was appointed to the committee on reorganization of the Medical Illustration Service Library and was elected its secretary.

NATIONAL MUSEUM OF HEALTH AND MEDICINE FOUNDATION

1990 BOARD OF TRUSTEES

CONSULTANT STAFF

OFFICERS

C. Everett Koop, MD, ScD, Chairman G. Stimson Eveleth, Vice Chairman Elgin C. Cowart, MD, Treasurer Heather P. Kurent, PhD, Secretary Elizabeth A. Videnieks, Planning Consultant

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Sandie Fauriol, CFRE Campaign Director

The following active committees of the NMHM Foundation served during 1990: Executive Committee: G. Stimson Eveleth, Chair; Elgin C. Cowart, MD; C. Everett Koop, MD, ScD; Heather P. Kurent, PhD

Bylaws Committee: Norm Estrin, PhD, Chair; Heather P. Kurent, PhD

Campaign Committee: Grant P. Thompson, Chair; John Duckworth, MD; Norm Estrin, PhD; Sheldon Gilgore, MD; Joshua Lederberg, PhD; Robert R. McMeekin, MD; J. Richard Munro; James S. Todd, MD; and Steve Graham (non-trustee); Bill Greener, PR Liaison

Finance Committee: Elgin C. Cowart, MD, Chair; Martin Cohen; G. Stimson Eveleth; Don M. Newman

Nominating Committee: John Duckworth, MD, Chair, Theodore Cooper, MD; Carolyne K. Davis, PhD, RN; Don M. Newman; G. Stimson Eveleth (ex-officio)

Strategic Planning: Heather P. Kurent, Chair; Norm Estrin, PhD; Ralph Garruto, PhD; Richard Hall, PhD; Charlene Drew Jarvis, PhD; Vivian Pinn-Wiggins, MD; Tom Rockwell, MD; J. Thomas Stocker, MD; Grant Thompson

Board of Trustees, NMHM Foundation

The Foundation was incorporated on June 8, 1989, by 11 founding trustees. The bylaws allow up to 27 members of the board. The Nominating Committee, listed previously, met several times during the year to enrich the composition of the board and to increase its number to 24.

At the annual meeting of the Board of Trustees, held on 26 July 1990, 10 new members joined the National Museum of Health and Medicine Foundation. These individuals are: Martin Cohen, Vice President, The Washington Post Companies, Washington, DC; Sheldon Gilgore, MD, Chairman, President, and CEO, G.D. Searle & Co., Chicago, IL; Richard L. Hall, PhD, retired Senior Vice President, The McCormick Company, Baltimore, MD; the Honorable Charlene Drew Jarvis, PhD, Member, City Council, Washington, DC; Joshua Lederberg, PhD, former President, The Rockefeller University, New York, NY; J. Richard Munro, Chairman, Time Warner Inc., New York, NY; Vivian Pinn-Wiggins, MD, Chairman, Department of Pathology, Howard University, Washington, DC; Tom Rockwell, M.D., Chairman, LifeTime Medical Television, Los Angeles, CA; Grant P. Thompson, Esquire, Executive Vice President, The World Wildlife Federation, Washington, DC; and James S. Todd, M.D., Executive Vice President, American Medical Association, Chicago, IL.

At its 5 October meeting, the Nominating Committee appointed two additional trustees, who will begin serving in 1991. They are James B. McCormick, M.D., Director, Science Heritage Limited and Director, Laboratory Medicine, Swedish Covenant Hospital, Chicago, IL, and Donald West King, M.D., Executive Director, American Registry of Pathology, Washington, DC.

Campaign Committee, NMHM Foundation

The most successful nonprofit organizations depend upon their trustees for raising the lion's share of major gifts. To meet the challenge of launching its first fund-raising program, the National Museum of Health and Medicine Foundation reinvigorated its Private Sector Group by renaming it the Campaign Committee and inviting a select group of trustees and others to serve on it.

Dr. Koop, Chairman of the Foundation, asked Grant Thompson, a nonprofit executive with a proven track record in fund raising, to chair the committee. Dr. Koop and Mr. Thompson asked the following individuals to serve on the committee, all of whom accepted. They are John Duckworth, M.D., Chairman, The Methodist Hospital Foundation, Memphis, TN; Norm Estrin, PhD, former Vice President, Health Industry Manufacturers Association, Washington, DC; G. Stimson Eveleth, Sr., Deputy Manager for Operations, Inter-American Development Bank (and Vice Chair of the Foundation), Washington, DC; Sheldon Gilgore, M.D., Chairman and CEO, G.D. Searle & Co., Chicago, IL; Steve Graham, President, Graham, Rogers & Co., Washington, DC (nontrustee member); Joshua Lederberg, PhD, former President, The Rockefeller University, New York, NY; Robert McMeekin, M.D., Washington, DC; J. Richard Munro, Chairman of the ExecutiveCommittee, Time Wamer Inc., New York, NY; and James S. Todd, M.D., Executive Vice President, American Medical Association, Chicago, IL. Mr. Bill Greener, former public affairs executive with G.D. Searle & Company, has agreed to serve on the committee as the public relations liaison.

Seed Money Campaign, NMHM Foundation

The Foundation launched its fund-raising efforts in late 1989 with a "seed money campaign" to raise \$350,000 for start-up and organizational costs. The campaign ended with a total of \$393.802 raised in gifts and pledges through December 31, 1990. This figure includes two gifts of \$50,000 from the College of American Pathologists and \$25,000 from the American Registry of Pathology, which helped launch the Foundation in mid-1989.

n recognition of the foresight and willingness to invest early in the Foundation's vision for a revitalized museum of health and medicine in a highly accessible location in the nation's capital, the Foundation established a "leadership list" opportunity for contributors. Donors who contributed \$10,000 and above during the Foundation's seed money campaign will have their names listed on permanent display in the new museum building. For 1990, these donors are:

American Medical Association American Registry of Pathology American Society of Clinical Pathologists College of American Pathologists Mrs. Marcella Hanafin/PyMaH Corporation Hoffmann-La Roche Foundation Johnson & Johnson Dr. and Mrs. James B. McCormick McGovern Fund for the Behavioral Sciences Dr. and Mrs. Robert B. McMeekin/IBM The Merck Company Foundation Novo Nordisk A/S—Novo Nordisk Pharmaceutical Sandoz Pharmaceuticals Corporation Schering-Plough Foundation G.D. Searle & Co. SmithKline Beecham The Upjohn Company Foundation

PLANNING EFFORT

The National Museum of Health and Medicine was given a major boost toward the end of 1990 in its site selection and design planning efforts for the revitalization and relocation of the museum facility.

A \$700,000 planning grant was appropriated by the U.S. Congress for FY '91 to help secure a site on the National Mall in Washington, D.C., and to develop the architectural and exhibit program designs for the nation's premiere learning center on health and medicine.

The planning grant, which will be implemented throughout 1991, will be administered by the Public Health Service of the U.S. Department of Health and Human Services (HHS) through the existing interagency agreement with the AFIP.

The preferred site for the new facility is the plaza in front of the Hubert H. Humphrey building at 2nd and Independence Avenue, S.W., at the foot of Capitol Hill and two blocks from the city's most popular attraction, the National Air and Space Museum.

The Humphrey building, which is also the headquarters of Health and Human Services, is the site

of choice after 39 other locations around the metropolitan Washington area failed to meet many of the site criteria established for the Museum. This new location will put the Museum back on the National Mall, near the site where its old red brick home stood from 1888 to 1968, enabling the Museum to reach a large proportion of the 25 million visitors who come to the nation's capital each year with its health promotion and disease prevention messages.

Louis W. Sullivan, M.D., Secretary of Health and Human Services, visited the Museum at its current location in July 1990 and assisted in the site selection process. In a letter to the Museum director, dated October 4, 1990, the Secretary extended an official invitation for the Museum to begin placing exhibits in the existing Great Hall of the Humphrey building within the coming year.

In the continuing spirit of public-private cooperation, the Foundation was challenged with raising \$250,000 in private funds to match the publicly supported planning grant.

PUBLIC PROGRAMMING LAUNCHED IN 1990

During 1990, the first major new program for the public was conceived, planned, and funded to debut on February 9, 1991. "The Patient is Abraham Lincoln" is the first of what the Foundation anticipates to be many educational events for "Fnends," other donors, and the public during the coming years. The costs of the two-part program have been covered by a generous grant of \$10,000 from the American Medical Association.

The first part of the program, to be held in February, will present historical evidence on President Lincoln's health. In May, a panel will discuss the ethical, legal, medical, and philosophical implications of testing remains from President Lincoln to determine whether or not he suffered from Marfan's syndrome. These panel members are: Victor McKusick, M.D. (Panel Chairman), Professor of Medical Genetics, Johns Hopkins University School of Medicine; Edward Alexander, PhD, former president, American Association of Museums; Collum Davis, PhD, Director, Lincoln Legal Papers Project, Illinois Historic Preservation Agency; Tim O'Leary, M.D., PhD, Chairman, Department of Cellular Pathology, Armed Forces Institute of Pathology; Lawrence C. Mohr, M.D., White House Physician; Ms. Lynne Poirier-Wilson, Vice President for Collections, The Strong Museum of Rochester, NY; Philip Reilly, M.D., JD, Executive Director, The Eunice Kennedy Shriver Center, Waltham, MA; and Ms. Cheryl Williams, President, The National Marfan Foundation.

The Foundation will use the Lincoln program scheduled for February 1991 as a springboard for similar programs during the year.

COMMUNITY RELATIONS AND PUBLIC PROGRAMS, NMHM FOUNDATION "FRIENDS" OF THE NATIONAL MUSEUM OF HEALTH AND MEDICINE

To expand its donor base nationwide and to inform more people about current museum programs and progress of the impending move, the Foundation created a "Friends" of the National Museum of Health and Medicine program.

"Friends" receive an annual subscription to the quarterly newsletter, To Your Health!, invitations to museum programs and exhibit openings, and a discount at the gift shop, which is expected to open in 1991. Donors may become "Friends" by contributing annual tax-deductible gifts in the following amounts: INDIVIDUAL: Member—\$35-\$99; Sponsor—\$100 and above; INSTITU-TIONAL: Sponsor—\$500; Patron—\$1,000 and above; and CORPORATE: Sponsor—\$5,000 and Patron—\$10,000 and above. Individuals may also purchase the newsletter only for an annual fee of \$10.

The "Friends" program was started in the fall of 1990. By the end of the year, the Foundation was able to count 200 individuals, foundations, medical associations, and corporations as "Friends" in the following categories:

INDIVIDUAL: 84 members, 78 sponsors; INSTITUTIONAL: 5 sponsors, 17 patrons; and CORPO-

RATE: 16 patrons.

COMBINED FEDERAL CAMPAIGN

The Foundation was accepted for the first time as a participating agency in the Combined Federal Campaign (CFC) of the Nation's Capital for its fall 1990 campaign. The CFC allows federal employees to designate gifts through payroll deduction to specific agencies.

Foundation and Museum staff attended a number of promotional activities sponsored by the Combined Federal Campaign headquarters in Washington, DC. The "CFC fairs" or "kickoffs" allowed participating agencies to hand out brochures encouraging donations to the respective agencies. The Foundation's appearance at these promotional activities received an enthusiastic response — not only could a federal worker support the Museum financially through the CFC, but he or she could also learn about the Museum and benefit from the experience of visiting it as well.

The results of the Combined Federal Campaign effort will be made known to the Foundation by the end of March 1991.

VOLUNTEER PROGRAM REORGANIZED

An expanded and upgraded volunteer program was initiated under the auspices of the Foundation during 1990. The first "Annual Volunteer Recognition" reception was held for docents (tour guides) and other volunteers on September 25. The longest serving volunteers were awarded certificates of appreciation. All volunteers received a key chain featuring the Foundation's logo and the inscription "In recognition of your valuable service." On December 1, an in-service training program was provided to volunteers to give them up-to-date information on the Museum's microscope collection. The Billings Microscope Collection is the most comprehensive in the world, and a number of artifacts from It constitute one of the most popular attractions at the Museum.

MEDIA ATTENTION: News Articles and Television Features

The National Museum of Health and Medicine of the AFIP and its nonprofit Foundation were the subject of 16 major news articles during 1990. This compares with three that appeared in 1989.

Many of the articles featured the creation of the nonprofit Foundation and the Museum's revitalization and relocation efforts.

One of the highlights of the year was the publication of an editorial in the Sunday, July 1, 1990 issue of <u>The Washington Post</u>, in its Op/Ed "Outlook" section. The article described why "It is time to put a National Museum of Health and Medicine on the tourist map."

The article continued: "Every year, almost 25 million visitors make their way to Washington's Mall. There they get glimpses of outer space, learn about wild animals and see stunning examples of art and technology. But in no museum on the Mall do they learn anything about their bodies, their health, themselves....

"A National Museum of Health and Medicine would fill that gap. The Museum, now in the preliminary planning stages, would be a learning laboratory for 4 to 5 million projected annual

visitors, and would educate millions more through traveling exhibits and community programs....
"Like other museums, the NMHM will nurture the human spirit and intellect. But unlike other museums, it will also have the potential to improve people's health and to save lives."

News Articles and TV Features

The following is a list of publications, and the dates of their appearances, in which articles about the Museum and Foundation appeared during 1990:

* St. Petersburg Times, 1/3/90; * Federal Times, 2/26/90; * The AFIP Letter, 4/90; * American_College of Physicians Digest, 4/90; * American Medical News, 6/22/90; * The Washington Post (Outlook Section), 7/1/90; * The Washington Times, 7/5/90; * Washington Post Health Section, 7/10/90; * Science, 7/27/90; * American College of Physicians Observer, July/August 90; * The New York Times, 8/4/90; * The Diamondback (University of Maryland), 9/25/90; * San Diego Union, 10/11/90; * Orlando Sentinel, 10/13/90; * Stripe, 10/19/90; and * Health Career News, 12/5/90.

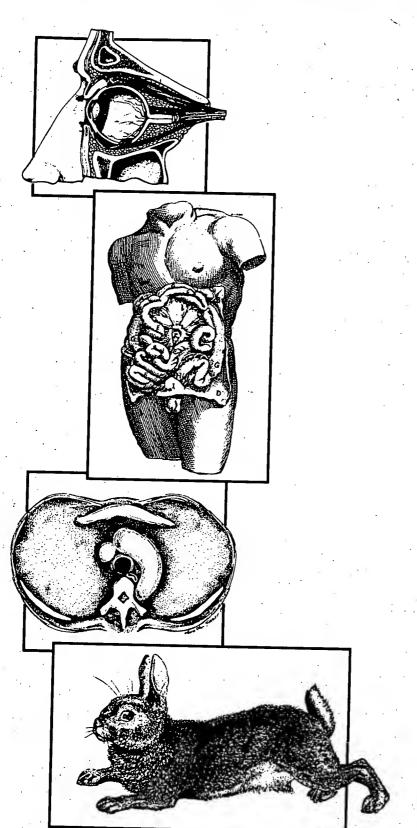
Visitor Numbers Up, NMHM/AFIP

The Museum's popularity continued to grow during 1990. Visitor figures were up by 20% during the year, or 35,765 visitors in 1990, compared with 29,771 in 1989. This increase is due to greater publicity, new initiatives by the Foundation, continued facility use by community groups, and a desire on the part of the public to learn more about the "miracles of medicine" and the advantages of a healthy lifestyle. These messages are carned in the many Museum exhibits and informational displays and programs.



Terry Lloyd and Toni Dickens of the Pathology Data Division discuss quality assurance and coding procedures.

ARMED FORCES INSTITUTE OF PATHOLOGY



YUAL REPORT



NATIONAL MUSEUM OF HEALTH AND MEDICINE OF AFIP

Marc S. Micozzi, M.D., Ph.D Director Date of Appointment - June 1986

MISSION

To further public and professional understanding of human health and progress against disease.

In FY91, Congress appropriated \$700,000 to the Assistant Secretary for Health at the Department of Health and Human Services to be used to continue planning for the Museum's new public education and exhibition facility. Those funds were transferred to AFIP under terms of an interagency agreement, and AFIP, in turn, contracted with the American Registry of Pathology to administer them. A number of studies were undertaken with those funds. The Exhibit Master Plan outlines broad thematic areas for exhibits in the new facility as well as identifying their adjacencies within the building. The Master Facility Program identifies office and area adjacencies as well as future budget and staffing needs and construction costs. A real estate analysis of potential sites concentrates on viable options should the preferred site —the east plaza adjacent to the Hubert Humphrey Building on Independence Avenue—be unavailable. A Site Feasibility Study analyzes the preferred site to determine if it is possible to build the new facility there. The National Health Exhibits Planning Commission will assemble a formative exhibit design team, integrating Museum staff and outside experts, to begin interpretation of the Exhibit Master Plan and to design, fabricate, install, and evaluate exhibits on the human body in the current museum facility. They will undergo formative and visitor evaluations to assist in creating definitive exhibits for the new facility. The Commission will also undertake a public communications effort to make more individuals and organizations aware of the Museum and its plans for the future. Finally, a project coordinator has been retained to oversee these studies and to produce a final, definitive document that gives guidance to the next phases for implementation of the project.

The National Museum of Health and Medicine Foundation retained fund-raising counsel to undertake a capital campaign feasibility study, which assessed awareness of and interest in the project as well as the potential amount of support that might be raised for the private sector portion of the project.

Congressional support for the project continues. FY91 funding was sponsored by the late Congressman Silvio O. Conte (R-MA) in the House of Representatives and Senator Mark O. Hatfield (R-OR) in the Senate. In the spring of 1991, Foundation Trustee Carolyne K. Davis testified before the House Appropriations Committee on behalf of the Foundation and requested additional funding to permit completion of the planning process. Subsequent legislation was carried by Congressman John Porter (R-IL) in the House and Senator Hatfield in the Senate.

ORGANIZATION

The National Museum of Health and Medicine consists of the Office of the Director and the following divisions:

- A. Collections and Research
- B. Education and Exhibit Programs
- C. Community Relations

STAFF

Medical

Marc S. Micozzi, M.D., Ph.D., Director

Scientific

Laurie Carroll, M.S., Special Projects Manager Adrianne Noe, Ph.D., Assistant Director for Collections and Research Paul S. Sledzik, M.S., Curator

Administrative

Matthew Ake, Volunteer James J. Damato, COL, MS, USA, Executive Admininstrator Gwyndolyn Edwards, Security Guard

(A/D) Karen Flaherty, Museum Intern
Alan Hawk, Collections Manager
Senta Hewitt, Security Guard
Theresa Strong-Johnson, Office Manager
Yvette LeGrande, B.S., Plastination Technician
Jeanne Levin, Tour Coordinator
Dick Levinson, Community Relations Specialist
Donna March, Student Intern Anatomical
Rosa McCoy, Clerk Typist

(A/D) Robert Montgomery, Archivist
Council Nedd, Student Intem
John Nealey, Security Guard
Orla O'Reilly, Project Officer
Tricla Paige, Student Intem
Donna Quist, Registrar
Michael Rhode, Chief Archivist
Sol Pargament, Docent/Volunteer
Lynn Peng, Volunteer

(A/D) Denise Sepkowski, Museum Intern Warren Underwood, Capt., Security Guard

(D) Stephanie Wilkerson, Science & Engineering Apprentice

(A) Allison Webb Willcox, B.A., Collections Manager

COLLECTIONS AND RESEARCH

The Division of Collections and Research includes Anatomical Collections, the Otis Historical Archives, Historical Collections, the Office of the Registrar, and the Human Developmental Anatomy Center.

A. Anatomical Collections

Collections Management. Collections management activities slowed down somewhat this year as we relied on volunteer and student aide assistance. Volunteers aided in the inventory and catalog of the Civil War, Indian Wars, and Nineteenth Century skeletal collections and the hepatic pathology wet tissue collection. Under the DoD Mentor Program, cataloging of the Civil War skeletal collection continued and is now 90% complete. Donna March refurbished 50% of the Milton Helpem, M.D., New York City Medical Examiners Collection. This collection was in need of primary care.

ACQUISITIONS. In 1991, the Anatomical Collections acquired few collections and other material. Four nineteenth century skeletons from Norfolk Naval Shipyard were transferred to the collections. Several hundred gross wet tissue specimens from the AFIP Tissue Repository were transferred to the Anatomical Collections this year.

PLASTINATION LABORATORY. The NMHM/AFIP Plastination Laboratory marked great advances in 1991. Final equipment purchases were completed and necessary modifications made. Several batches of material were plastinated for use at the Museum, by WRAMC, and at USUHS. A fee-for-service program was initiated in the laboratory to help recover costs for plastination services provided to outside institutions.

LOANS. In 1991, specimens were loaned to numerous AFIP staff members, USUHS, the National Museum of Natural History, and the Pentagon.

RESEARCH REQUESTS. Research requests include telephone inquiries, written requests, and use of the collections by researchers. In 1991, the Anatomical Collection staff answered nearly 80 telephone inquiries and 45 written requests for information. Nearly 100 researchers visited the collections for a variety of reasons, ranging from tours to scientific study of museum specimens. The topics researched included Civil War medicine, skeletal pathology, neurosurgery, forensic pathology, pediatric pathology, paleopathology, forensic anthropology, and veterinary pathology.

EDUCATION. The fourth annual Forensic Anthropology course was completed in 1991, with outstanding participant evaluations. The 35 participants from this year included medical examiners, coroners, forensic dentists, and law enforcement personnel. Faculty included Dr. Hugh Berryman of the University of Tennessee, Dr. Douglas Ublelaker of the Smithsonian Institution, and Dr. Frank Saul of the Medical College of Ohio and member of the AFIP Scientific Advisory Board. A manual was also produced for the 1991 course. Planning for a new course in paleopathology took place this year. The course is scheduled for March of 1992.

Anatomical Collections staff began to work on the "Visualizing the Human Body" exhibits, which will focus on gross anatomy and common pathology. The staff also contributed to a set of exhibits on 19th century military medicine for display at the Pentagon.

Staff members gave presentations to the Northern Virginia Relic Hunters Association and the Lehigh Valley Association of Clinical Microbiologists and Immunologists, the Smithsonian Institution Resident Associate Program and Young Resident Associate Program, the George Washington University Teaching New Technology series, and several D.C. area elementary and secondary schools.

OTHER ACTIVITIES. Staff research in 1990 continued in the areas of forensic anthropology, skeletal pathology, and paleopathology. Staff members of the Anatomical Collections assisted the Office of the Armed Forces Medical Examiner with the identification of remains from Operation Desert Storm and other OAFME skeletal cases.

The casting of skeletal pathological specimens by Dr. Diane France of France Casting was implemented this year. The casts are quality reproductions of Civil War amputations, treponemal infection, and other diseases and injuries. The casts should prove useful to orthopedic pathologists, paleopathologists, and forensic pathologists. These casts are offered for sale through France Casting. A percentage of the proceeds goes to fund research projects in the anatomical collections.

Anatomical Collections applied for a Science Museum Initiative grant from the Howard Hughes Medical Institute. The grant, called the Museum Out-Reach in Forensic Biology (MORFORBIO), would provide area educators access to museum-based resources to help introduce and teach concepts of scientific problem-solving and impart information on human biology, the skeleton, DNA testing, and other important topics in forensic biology.

B. OTIS HISTORICAL ARCHIVES

RESEARCH REQUESTS. The Otis Historical Archives (OHA) received a total of 115 requests for information this year, not including Medical Museum and AFIP requests, visitors, or referrals to other institutions. Users included the Netherlands Photo Archives, the Uniformed Services University of the Health Sciences, the Pan-American Health Organization, Natural History Magazine, the USAF Museum, the Museum of New Mexico, the American Occupational Association, American University, the University of Pittsburgh, Lee-Fendall House, the National Institutes of Health, the Smithsonian Institution, the Electron Microscope Society of America, and the Center of Military History, among others. The archives had at least 128 visitors in 1991 for tours, in-depth research, or professional discussions. The Vorwald Collection continued to be used in asbestos litigation and by professional industrial medicine historians. Markowitz and Rosner used several cases in their history, Deadly Dust: Silicosis and the Politics of Occupational Disease in Twentieth-Century America. A great deal of support has been provided to the National Museum of Natural History's Repatriation Office in accordance with recent law. Many records deal with the Army Medical Museum's role in collecting American Indian material for the Smithsonian.

ACQUISITIONS AND PROJECTS. Collecting was less intensive than in the past, with no major acquisitions. The National Library of Medicine transferred surplus photographs and received duplicate public health posters in return. The computerized inventory and finding aid project, started in 1989, continued. Heather Armbrustmacher, a DOD Science & Engineering Apprentice Program student, began compiling a data base of museum publications and references in print from 1862 until the present. Volunteers assisted the staff with research on Civil War collections. Gary Masters of the Casualty Care Research Center, USUHS began arranging the Swan Collection of Vietnam-era trauma slides for eventual use in teaching. The combination shelf list and inventory of the archives is still

continuing and will eventually serve as the basis for a 'quide' to the OHA collections.

OTHER ACTIVITIES. The column in the AFIP Letter describing the more interesting parts of the OHA collections was discontinued after the column on the Eadweard Muybridge photographs. Exhibit support was provided for the series of exhibits at the Pentagon, with Rhode writing "Civil War Medical Illustration in the US Army." New exhibits on tropical medicine were also begun by OHA staff. Dr. Stocker's project for an AFIP Oral History started in the fall and has received management and research support.

Rhode attended the Getty Conservation Institute course, "Preventive Care of Historic Photographic Prints and Negatives," in January. In September, he attended the Society of American Archivists annual meeting in Philadelphia.

Beginning in November, the OHA served as a testing ground for "fees for services" to recover costs. At the present, this consists of charging for duplicating services. The program is too recent to project if an anticipated drop in requests will occur.

C. HISTORICAL COLLECTIONS

COLLECTIONS MANAGEMENT. Computerized inventories of artifacts stored in Hammond Hall, the microscope storage area, Siliphant Hall, the warehouse, and the exhibit halls now include 11,321 artifacts, approximately 95% of Historical Collections. The artifacts included are listed by catalog number, accession number, classification based on Medical Subject Headings, object name, and location. The Historical Collections Computer Catalog, which differs from the inventory by containing a more detailed description of the artifact, now includes 3,623 artifacts, approximately 25% of the collection. The 1,749 items_cataloged in 1991 include new accessions, previously accessioned artifacts, and artifacts going out on loan.

One hundred and eight artifacts were donated to Historical Collections in 1991. Significant additions to the collection include a Diff 3/50 robotic microscope used at Camegie Mellon University, a set of Scrubpocs donated to the Museum by the inventor Mai Lon Lee, RN, and a sphygmographe by Marey, an early device designed and fabricated in 1890 to record a patient's heartbeat.

Historical Collections is collecting artifacts to document military medical activities during the recent Persian Gulf War. Over 80 objects, ranging from NBC decontamination kits, IV sets, and bandages to first aid kits, were donated to the Museum by the 47TH MEDSOM, Third Medical Command in Saudi Arabia. Several captured Iraqi personal medical kits and an atropine styrette were also included in the collection. Other objects that were collected for the Museum by the U. S. Army Property Recovery Team are due to armye during the first quarter of 1992.

Several objects for the National Medical Repository, which will document contemporary medical technology, have been donated to the collection. These objects have included a non-working prototype Mini-Pak 911-ST compact blood pressure/TPR/pulse oximeter monitor and a set of prototype castings of the University of California total knee replacement prosthesis and a UCI total knee replacement surgical instrument kit from the same source. These items complement an extensive collection of devices that document prosthetic development.

Twenty-eight artifacts were loaned to other institutions for exhibition. Historical Collections supported exhibits at the Dewitt Stetten Museum of the National Institutes of Health and at Walter Reed Army Medical Center in honor of National Operating Room Nurses' Week. Four microscopes from the Billings Microscope Collection are featured in a traveling exhibit, "The Age of the Marvelous." The topic of the exhibit, which Includes the Robert Hooke microscope, is the development of science in Europe circa 1700. The exhibit opened at the Hood Museum in Hanover, New Hampshire, and it will travel to Raleigh, North Carolina; Houston, Texas; and Atlanta, Georgia.

CONSULTATION. Historical Collections addressed 113 research inquiries involving materials in the collections and research specialties of the staff. Professional consultations were provided to numerous institutions, including the Smithsonian Institution, the National Library of Medicine, the Medical Branch of the University of Texas at Galveston, the Mutter Museum of the College of Physicians of Philadelphia, and the Museum of the American Academy of Otolaryngology-Head and Neck Surgery in Alexandria, Virginia.

Staff delivered numerous lectures and presentations throughout the year, including:

Alan Hawk, "Historical Collections of the National Museum of Health and Medicine," Docent training program, October 1991.

Council Nedd II, "Traditional Asian Pharmacopeia as Found in Historical Collections of the National Museum of Health and Medicine," Herb for Health 91, September 1991.

Council Nedd II, "The Near-second Golden Age of Herbal Medicine: The History of Herbal Medicine in the 1850's," Tom Wolfe Tuesday Lecture Series, November 1991.

Adrianne Noe, "Potential of the National Museum of Health and Medicine," American Studies Association, March 1991.

Adrianne Noe, "Museums and Aerospace Medicine," Aerospace Medical Association, May 1991.

Adrianne Noe, "Historical Issues in Biomedical Technology," Society for the History of Technology and the History of Science Society, November 1991.

Historical Collections staff provided artifact and research support for the following exhibits:

"Human Reproduction, Growth, and Development"

"Medicine during the Civil War" (Pentagon)

"The Patient is Abraham Lincoln"

"Tropical Medicine" (Pentagon)

Images from the collection appeared in Susan Provost Beller, Civil War Medicine, (Crozet: Betterway Publications, 1992); Paul Hoffman, "Lincoln's Living Legacy," Discover, August 1991, p. 4; and Jacob Lowenstein, "The Remaking of the President," Discover, August 1991, p. 19.

After the February 9th announcement of a committee formed to investigate extracting DNA from tissue samples from the body of Abraham Lincoln, the Lincoln life mask by sculptor Avarel Fairbanks was featured prominently in photographs in the Baltimore Sun, Somos (Argentina), and Scholastic

Science News as well as in Associated Press and United Press International wire photos. Historical artifacts relating to the assassination of Abraham Lincoln also appeared on the CBS Evening News, Good Moming America, and Cable News Network.

OTHER ACTIVITIES. Artifacts from Historical Collections have been featured in the following films: "Be Grateful," television spot on the Armed Forces Television Network; and "The Cell: Basic Unit of Life," National Geographic Television Special.

Departmental goals include identifying and initiating reimbursable activities, continuing to catalog the growing collections to aid research and access, and continuing to develop the National Medical Repository.

D. OFFICE OF THE REGISTRAR

The Office of the Registrar facilitates and maintains procedures and records for the museum acquistions and loans.

OUTGOING LOANS. During the calendar year 1991, the Office of the Registrar coordinated and negotiated 13 outgoing loans. After careful and considerable negotiations, the NMHM agreed to loan the Hood Museum of Art several of the most historically significant microscopes from the Billings Collection, including the Robert Hooke Microscope, ca. 1665. The microscopes are displayed in a traveling exhibit titled "The Age of the Marvelous." Before agreeing to this loan the Museum required that only professional art packers, handlers, and shippers handle the microscopes. The assembly and display of the microscopes were to be handled only by a NMHM staff member or an appointee. The NMHM/AFIP the painting of Dr. John Brinton by Thomas Eakins remains on display at the National Gallery of Art, Washington, DC.

Negotiations and arrangements were made for the transportation of the Museum's "Mummy Exhibit" to be displayed for the "World Congress of Mummy Studies," Museo Arqueologico y Etnografico, Canary Islands, Spain. Again, the most conservative efforts were required by the NMHM before approving an international loan of this nature. The Museo Arqueologico y Etnografico has agreed to fund the cost of couriers to escort the artifacts to and from the Canary Islands, Spain and will ensure the services of only professional art packers and movers.

INCOMING LOANS. Six incoming loans were coordinated for the Museum during the 1991 calendar year. Several pieces of art were displayed at the Museum in an exhibition titled "Depression Awareness."

The borrowing of gross anatomical specimens and tissue for the purpose of plastination has been steadily increasing due to the unique potential of the process and to the durability and authenticity of the product.

ACQUISITIONS. The Museum registered 75 accessions during the 1991 calendar year. Several large historically and scientifically significant collections were received during the 1991 calendar year. Some of these acquisitions included the Lindenberg Neuropathology Collection from the Maryland State Medical Examiners Board, Baltimore, MD; the James P. Arey and Marie Valdez-Dapena Photographic Collection of Pediatric Pathology from Saint Christopher's Hospital for Children, Philadelphia, PA; and

the Camegie Human Embryology Collection from the Camegie Institution.

COLLECTIONS MANAGEMENT COMMITTEE. The NMHM and the AFIP Collections Management Committee (formerly the NMHM of the AFIP Acquisitions Committee) held several meetings during the 1991 calendar year. Among the topics discussed were the acquisition and facility requirements for the Shupe Veterinary Collection, the possible acquisition of the American Cancer Society Collection of Lung Pathologies, and Dr. Weedn's DNA testing on bone material in reference to the possible deaccession of the Abraham Lincoln remains.

The NMHM/AFIP Collections Management Committee continues to comply with the federal law requiring that federally funded museums return to the American Indians human and funerary artifacts for the purpose of repatriation.

ONGOING ACTIVITIES. The Office of the Registrar has forwarded to the Office of Legal Counsel, AFIP, several agreements and policies for legal approval and input. These policies and agreements will be in effect upon approval for the 1992 calendar year. The office has also developed several documents and standard policies to effectively overall manage acquisitions and loans procedures for the museum.

DEPARTMENTAL GOALS. It is the goal of the Office of the Registrar to continue to facilitate and support the acquisition and loan programs of the National Museum of Health and Medicine, AFIP. Continued emphasis will be placed on the safety of objects and collections in transit and the use of professional art moving companies to provide these services. In an effort to overall manage the environment of museum collections, the office will continue to procure and implement "state-of-the-art" temperature and humidity monitoring equipment.

The Museum has also expanded its use of the AFIP storage facilities in Rockville and now occupies approximately 10,000 square feet of space. The facility fills an increasing need for space as the Museum incorporates larger collections and new exhibition programs.

E. HUMAN DEVELOPMENTAL ANATOMY CENTER

Although it was donated at the close of 1990, the Carnegie Human Embryology Collection was accessioned in May of 1991, forming the core of a multicollection Human Developmental Anatomy Center. This collection consists of just over 10,000 embryos in various forms. Historically and scientifically, this is one of the world's most significant developmental collections. Work with this collection established the now-standard 23-stage horizon system for human embryology, and some of the most prominent biological scientists have helped develop the materials here or have used its holdings in their own research. A complete computer-based inventory of the slides and the other materials in the collection—photographs, drawings, over 300 rare models, case files, and tens of thousands of related reprints—will be prepared. Also at the center is the James Arey-Mane Valdes DaPena Pediatric Pathology Collection of 7,500 lantem slides depicting gross and microscopic images. Within the Museum, but not yet in the center per se, are the materials from 1,000 NIH-AFIP cases of sudden infant death syndrome (slides, wet tissue, blocks, and abbreviated records) and the Patanelli-NICHD limb development slide collection consisting of over 200 slides, each well prepared, researched, and described.

Several collections have been committed for addition to HDAC within the next five years and prepara-

tions are being made for their addition: the Hooker-Humphrey Embryological Collection, consisting of 108 linear feet of boxes of human preparations using Nissl stains to highlight central nervous system features, complete with records, and the renowned Blechschmidt Collection. Three major comparative collections also currently await transfer to the center. Wet tissue capabilities are being added, enabling us to make use of the few wet specimens that came from Camegie and to add other materials from other laboratories and research sites.

Within the Institute there are numerous opportunities to coordinate with other programs: the National Museum of Health and Medicine, the Office of the Armed Forces Medical Examiner, Pediatric Pathology, Medical Illustration, Neuropathology and the Yakovlev Collection, Orthopedic Pathology, Cellular Pathology (particularly the imaging technologies), etc. HDAC has provided access to all AFIP requestors. From outside the Institute, requests for access to the Human Developmental Anatomy Center have taken several forms. Some have been sent by medical artists; others have been submitted to study the mechanism of male phenotypic sexual differentiation. The specific protocol calls for using recently developed immunohistological techniques for quantifying androgen receptor levels in formalin-fixed tissues. Related requests involve investigating the origin and histologic structure of the gubernaculum. Other research programs involve mammalian preimplantation embryos and blastocyst-endometrial interactions.

Proposals to use the serially sectioned embryos for three-dimensional computer-based reconstructions are the most numerous and range from reconstructing one organ to an attempt to place several hundred embryos on a CD ROM format with multiple digitized organ systems for reconstruction and visual manipulation. At this time, the Institute plans to begin with capturing a photographic image of each section using a microscope paired with a high-resolution camera and automated recording system. Organ systems will be traced and digitized for later computer-based reconstruction. If a researcher has a particular interest in an anatomical feature, images can be generated here for work in the researcher's laboratory, and the newly generated data can be reincorporated into a growing base back at the HDAC site.

AFIP has committed significant resources to maintaining the collections. With the assistance and guidance of a group of interested researchers outside the AFIP, the center will be applying for numerous grants in support of potential programs and additional funded research. An NIH Research Resource Status Grant is the most notable of these. Planned application approaches will be addressed, noting the important opportunities to involve existing AFIP collections and stressing the AFIP's role as repository for the materials—providing the basis support for the collections' maintenance and facilitating supported research.

At a two-day conference held in December some of these issues were discussed with a national panel of researchers, administrators, computer specialists, and others familiar with the materials in the center. The guidance offered by this group on resource and policy development will form the working agenda for the center in the coming year.

EDUCATION AND EXHIBIT PROGRAMS

1991 was a year of development and expansion for the Museum's department of programs and exhibits. Many new collaboritive efforts were established with community organizations to facilitate programs. Many old exhibits were removed and replaced by several new exhibits involving interactive computer technology. The museum visitation figures consequently increased from last year to a new

record of 50,528. The program office benefitted from the outstanding contributions of two interns from local university health promotion programs.

EXHIBITS. Three permanent exhibits were developed this year and installed using interactive technology, The Patient was Lincoln/Substance Abuse Prevention/Living Classroom. The Self Help/Empowerment Center was developed in conjunction with the temporary depression exhibit, "From Darkness to Light," which was exhibited from June through November. The Self Help Center remains, and brochures and videos from 200 national organizations are available. This concept of the Individual taking responsibility for his/her disease prevention and health empowerment is now a central theme when developing future exhibits. Plans were submitted to SID for the future "Human Body" exhibit, which will portray the body as a series of systems. Exhibits featuring the cardiovascular, renal, hepatic, gastrointestinal, central nervous system, skin, and respiratory systems are scheduled to open in 1992.

PROGRAMS. Several health promotion events and activities were advertised and scheduled at the Museum and also off-site. The majority were collaborative planning efforts with outside organizations. Examples of these events were self-help organizations sponsoring lectures for the public, a five-day symposium on "Herbs for Health," activities at the Museum in support of the Great American Smokeout, and a ceremony for new graduates of the Inner City AIDS Network. Contacts were made with leading local and national health agencies for future ventures. The Museum staff attended Yr 2000 PHS observations as well as exhibiting at their major conferences.

OFFICE OF COMMUNITY RELATIONS

The Office of Community Relations works with newspapers, magazines, broadcast media, Congressional offices, and community organizations to encourage media coverage of AFIP's National Museum of Health and Medicine that is factual, accurate, and positive in tone. In working with the media, we seek to emphasize the Museum's focus on critical public health issues, the importance of the Museum as a bridge between biomedicine and the general public, the Museum's special role in recruiting the health care professionals of tomorrow, and the Museum's active research programs in such fields as medical history, physical anthropology, and the link between diet and cancer.

"THE PATIENT IS ABRAHAM LINCOLN". The Office of Community Relations was actively involved in the conception, planning, and execution of this program over a period of several months. Museum Director, Dr. Marc Micozzi, and Dr. James Todd, executive vice president of the American Medical Association were the key presenters at a February symposium on the health of Abraham Lincoln. The announcement that the Museum was studying a proposal to test Lincoln's DNA resulted in unprecedented international media coverage for the Museum. Among the foreign and domestic news organizations that did stories on this museum program were:

The British Broadcasting Corporation, Le Monde, The Sunday New York Times (front page), China Daily, Australian Broadcasting Corporation, CBS Evening News, Good Morning America, Cable News Network, Canadian Broadcasting Corporation, National Public Radio, Voice of America, Associated Press, United Press International, Sao Paulo Tribune, Hombre De Mundo, Chicago Tribune, American Medical News, the Providence Journal, the San Francisco Chronicle, the Winston-Salem Journal, Portland Oregonian, Newsweek, Los Angeles Times, Japanese Broadcasting Corporation, and the Midland (Texas) Reporter-Telegram.

When the members of the Lincoln Panel came to Washington for a two-day meeting, their activities

included a Captiol Hill press conference, a reception, a dinner, and 12 hours of deliberations conceming complex ethical and legal issues.

ARMED FORCES RADIO AND TELEVISION SERVICE. When John Prescott & Associates, a film and video company working for the Armed Forces Radio & Television Service wanted to film Museum artifacts for a public service spot, the Office of Community Relations coordinated the filming and worked to ensure that the Museum would be credited in the finished PSA. This spot, titled "Be Thankful," focuses on some of the breakthroughs in medicine that have taken place since 1790. This public service announcement will be seen by American service personnel around the world. Dr. Enrique Mendez, Deputy Secretary of Defense for Health Affairs, requested that the spot be incorporated into a Pentagon exhibit created by the National Museum of Health and Medicine.

THE JARVIS SCIENCE STUDENT AWARDS. District Councilmember Charlene Drew Jarvis is the sponsor of an annual program to honor outstanding math and science students in Washington, D.C. For the past two years, this event has been held at the Museum. This event is just one of the ways the Museum reaches out to young people in an effort to get them excited about the possibility of pursuing a career in medicine, scientific research, or health care.

NATIONAL SCIENCE DAY. When the National Science Foundation organized a special day of programs and activities to give young people a sense of the challenge and excitement associated with scientific pursuits, the National Museum of Health and Medicine was one of 20 Washington institutions that helped to plan and execute this event. The Office of Community Relations represented the Museum at these planning sessions and played a key role in devising the Museum's own activities on this day.

CONGRESSIONAL VISITS. As Ranking Minority Member of the Senate Appropriations Committee, Senator Mark Hatfield (R-Oregon) is one of the most influential people on Capitol Hill. His long-standing interest in such issues as public education, medical research, and job training mean that he shares important common interests with the National Museum of Health and Medicine.

THE NATIONAL AIDS EXHIBIT CONSORTIUM. Together with the American Medical Association and eight of the most prestigious science museums in America, the National Museum of Health and Medicine is a founding member of this newly created entity. When the consortium met in Washington this summer, many important issues were decided.

GENERAL ACTIVITIES. Information and assistance was provided to journalists from the CBS Evening News, the Washington Post, the Washington Times, the Hartford Courant, Scholastic Magazines, American Medical News, Doctor's Weekly, and the Civil War Times. VIP visitors, including the Defense Minister of Uganda, the Surgeon General of Thailand, and a delegation of Soviet policy makers and planners, were escorted through the Museum.

PRESENTATIONS

Educational Exhibits

"From Single Cells: Human Reproduction, Growth, and Development," January 1991, National Museum of Health and Medicine.

Radio/Television Appearances

ABC "Good Morning America." February 12, 1991.
Voice of America, February 12, 1991.
Australian Broadcasting Corporation, February 1991.
Canadian Broadcasting Corporation.
British Broadcasting Corporation.
WAMU, National Public Radio, February 1991, December 27, 1991.
"Seattle Today," February 18, 1991.

Invited Seminars

Fred Hutchinson Cancer Center, Seattle, WA, March 1991. U.S. Botanic Garden and Green Cross Clinic, "Herbs for Health," September 1991. New York Botanic Garden, "Plants that Heal," October 1991.

"The Patient is Abraham Lincoln," National Museum of Health and Medicine, Washington, D.C., February 1991.

University of Buffalo, SUNY, Health Sciences Library, November 1991.

Codirector and Lecturer

Facilitator, "Ethical, Legal and Social Aspect of Medical Care," Uniformed Services University of the Health Sciences, Bethesda, MD, 1991/92.

PUBLICATIONS

Articles

- 1. Sledzik PS, Ousley S. Analysis of six Vietnamese trophy skulls. *J.Forensic Sci.* 1991;36:520-530.
- 2. Sledzik PS, Moore-Jansen PH. Dental disease in 19th century military skeletal samples. In: Kelley MA, Larsen CS, eds. *Advances in Dental Anthropology*. New York, NY: Wiley-Liss; 1991:215-224.
- 3. Sledzik PS, Moore-Jansen PH. Dental pathology. In: Pfeiffer S, Williamson R, eds. Snake Hill: An Investigation of a Military Cemetery from the War of 1812. Toronto: Dundurn Press; 1991:227-246.
- 4. Hambrecht FT, Rhode M, Hawk A. Dr. Chisolm's Inhaler: A rare confederate medical invention. J.S.C. Med. Assoc., 1991:277-280.
- 5. Hawk, A. Review of John S. Haller. Intolerable, excruciating, and troublesome: Military ambulance technology, 1793-1889. *Caduceus*. 1991;7:2-30.
- 6. Noe, A. Excavation of the 1814 Battle of Snake Hill: A medical history perspective. *Caduceus*. 1991;8:1-18.

- 7. Cornoni-Huntley JC, Harris TB, Everett DF, Albanes D, Micozzi MS, Miles T, Fledman JJ. An overview of body weight of older persons, including the impact of mortality. *J. Clin. Epidemiol.* 1991;44:743-753.
- 8. Micozzi MS. Disease in antiquity: The case of cancer. Arch. Pathol. Lab. Med. 1991;115:838-844.
- 9. Micozzi MS. When the patient is Abraham Lincoln. Caduceus 1991;7:34-47.
- 10. Micozzi MS. Surviving Fieldwork. Report of the Advisory Panel on Health and Safety in Fieldwork, by N. Howell. *Am. J. Hum. Biol.* 1991;3:405-406.

Books and Chapters

- 1. Micozzi MS. Postmortem Change in Human and Animal Remains: A Systematic Approach.

 Springfield, IL: Charles C Thomas; 1991.
- 2. Noe, A. Medical History. In: Pfeiffer S, Williamson R, eds. Snake Hill: An Investigation of a Military Cemetery from the War of 1812. Toronto: Dundurn Press;1991:61-69.
- 3. Micozzi MS. (1991) Foreword: Recovery and analysis of human remains from historic sites. In: Pfeiffer S, Williamson RF, eds. Snake Hill: An Investigation of a Military Cemetery from the War of 1812. Toronto: Dundurn Press;1991:15-17.

Abstracts and Other Publications

- Micozzi MS. The Army Medical Museum and its role in beating swords into scapels (and libraries and museums). Second Annual Aesculapian Series: The relationship of medicine to literature, art, philosophy, religion and history. Medical College of Ohio at Toledo, January 24, 1991.
- 2. Klepinger L, Katz D, Micozzi MS. Evaluation of public aging methods II: The males. American Academy of Forensic Sciences; 1991; Anaheim, CA.
- 3. Smith JC, Micozzi, MS, Brown ED, Edwards BK, Bieri JG, Taylor PR, Khachik F, Beecher GR. Plasma carotenoids in men fed beta-carotene or vegetables for six weeks. FASEB Abstracts:1991.
- 4. Micozzi MS. Does Your Diet Prevent or Promote Cancer?" Executive Health Report, Vol 27, No. 4, January 1991.
- 5. Micozzi MS. The Two Worlds of Columbus: Health and Disease in the New World. *Encounters* (Spain '92 Foundation), Vol. 5-6, pp. 42-43, 1991.